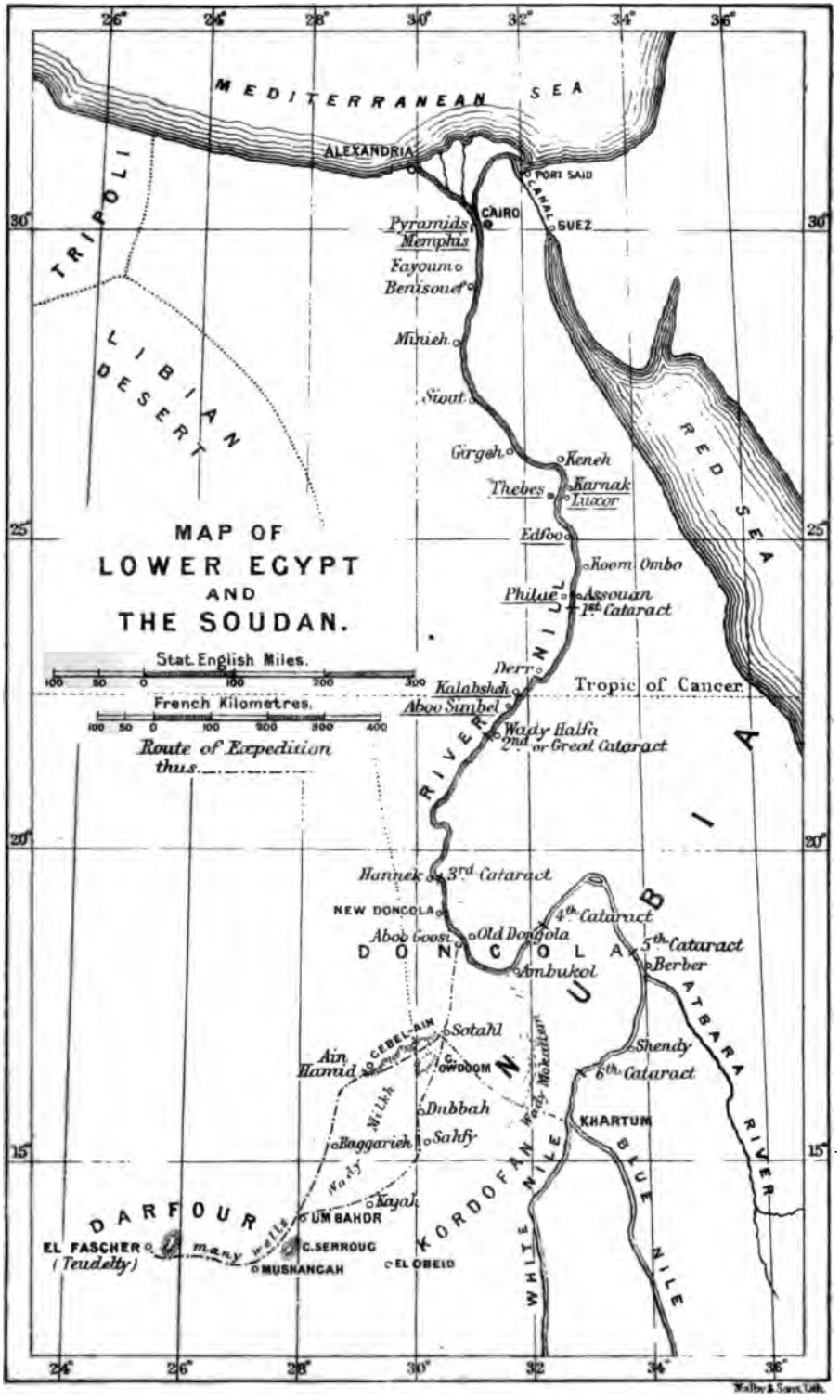
DESERT LIFE

B·SOLYMOS



W.H. Allen & Co., 13 Waterloo Place, London.

DESERT LIFE.

RECOLLECTIONS OF

An Expedition in the Soudan.

BY

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PREFACE.

SEVERAL years ago, when fully engaged in professional work on the Continent, a strong and twofold desire grew upon me, which continually increased in fascination and strength. This feeling, which grew from desire to longing, and ripened from longing into resolve, was composed of a primary desire to see and study some of the great engineering schemes projected by the late Khedive of Egypt, Ismail Pasha, through the agency and ability of Mr. John Fowler; and intermingled with this was a more romantic wish to look upon the land of Egypt, to see those golden sands reflecting the eternal sunshine, to dream and be silent near the solemn antiquity of the Pyramids and the mysterious, far-seeing eyes of the Sphinx, to sail upwards along the course of the broad and fertilizing Nile (itself a thing of constant wonder and of almost pardonable worship), and frequently to stop upon its banks to view the ruins of godlike temples and the remains of the cities of a mighty race which grew and flourished and decayed before Athens or Rome had shown signs of infant life. Then, after passing through this continuous succession of the grand remains of those

ancient and princely peoples, my longing led me on to penetrate further, into Nubia and the Soudan, where the vestiges of men are scarce indeed, though not entirely wanting, but where Nature reigns with almost undisputed and often terrifying power.

For a time other work and duties prevented me from fulfilling these wishes, though I never ceased to cherish them, and they grew daily stronger; until in the early part of 1875, and just after my arrival in England on a visit I had designed to last some time, my happy star brought within my power the possibility of realizing my twofold resolve at once. I seized upon the chance with eager acceptance, although, like all the gifts which the gods give us, this was not one of unalloyed delight, for it compelled me to yield for a time another plan long made and just commenced, that of spending a time of rest and holiday in England, to see the land and people I had looked upon with love and admiration from my early youth, and to study with my own eyes the characteristics which make a nation great. But the unexpected good fortune soon made me forget my minor disappointment; and I started off one evening from Charing Cross with my through ticket to Alexandria in a frame of mind most happy, for I was filled with expectation of the wonders to be seen and studied in the mysterious Soudan and the shadowy wide-spreading wilderness.

Without a pause we went through sunny France, too

sunny for a continuous railway journey even in May, and productive of a parboiled lassitude and general feeling of ferment and wretchedness as the train carries one through the flat and uninteresting country of the South. At last Marseilles, and time for a much needed bath and breakfast; then step on to one of the fine and well-appointed boats of the Messageries, and sigh with a tranquil sense of rest for a few days, a somewhat volcanic security, it is true, if one is not a good sailor.

After a safe arrival at Alexandria, and some four or five months spent in studies in the Delta of Egypt for a system of canalization, we started up the Nile for our more extensive and enterprising engineering work in the interior; one party of engineers to investigate a route for a railway from where the Nile bends at Abu Goosi, direct along the Wady Mokattem, to Khartoom; the other four engineers with the doctor to penetrate at once south-west into the interior, to reach the capital of the newly conquered province of Dar-Fûr, and, returning thence towards the Nile to meet the first party from Khartoom advancing to meet them through Sotahl, the first group of wells inland from the river. Thus the first party, of which I was a member, had opportunity and time both to make a rapid military survey and study of the tracts lying between old Dongola and Khartoom on their forward journey, and then, retracing their steps along the same general direction, to make the surveys necessary for a line of railway, so detailed that it might

be made to-morrow. Then, when they had got back over their old course to Sotahl, they continued the careful survey along the ground traversed by the second party, who by this time had reached their journey's end at El Fasher, and were commencing to bring back the chain of survey to meet that brought onward by the author's party from Sotahl. All this was done, and the meeting was at Um-Bahdr, the furthest point to which the author penetrated. Beyond that place the bush grows thicker, the vegetation more profuse, and the trees of larger growth. The great and beautiful Adansonia appears at more frequent intervals, sometimes in large groves, and for many miles the party which made the survey from El Fasher had to cut its way through thick continuous clumps of the close-growing bushes of the country, appallingly clothed with thorns. If the reader has been able to wade through these dry details, and has referred occasionally to our little map, he will have some idea of the position of the country traversed, and of the very favourable opportunities the Author had for studying and carefully observing and noting the characteristics and features of the country, the people, the animals, the vegetation; all new and strange, and greatly opposed to the popular notion of a desert, which I take to be somewhat of this sort:—A howling wilderness of illimitable sand and stones and barren rocks, where the parched and lonely wanderer struggles on despairingly towards the far away oasis,

his sufferings aggravated by a frequent distant vision of palm trees and green herbs and broad sheets of water, all very beautiful to look upon, but often filled with a tremulous motion, as though agitated by the breath from the laughter of innumerable mocking fiends; for this is the *mirage*. In all this picture there is truth, but it applies only in its utter barrenness to the regions of the Great Sahâra and the vast deserts lying north of the limit of tropical rains, separated from the country I have tried to describe by a line almost as sharp as that drawn upon the map along the 18th parallel of north latitude. I think that now enough has been said to show the reader where to look upon the map; but as I must not leave the two parties of engineers as if remaining in the heart of Africa, it remains only to be told that, after their meeting at Um-Bahdr, and a stay for rest, they started off towards the Nile, but by a more roundabout and circuitous route than the straight forward one down the Wady Milkh, for the end of the dry season had come, and many of the wells were entirely dried up. To avoid therefore this horror of water failure, they had to strike east and south to Kordofan, and grope out a route from well to well through Kahjah, Sahfy, and minor wells till they again arrived at Sotahl and the Nile at Abu Goosi, after a month's march by night, and the loss of many camels from exhaustion, heat, and rapid travel, for they were compelled to push forward to get to the river and avoid being caught by

the tropical rains, which would have rendered the camels useless for locomotion, and perhaps detained the party amid tempest and damp and fever till the three months' rain had stopped. Having thus, dear reader, endeavoured to lay before you in the preface the dry details of circumstance and place, I will say farewell; standing like a showman before my booth, in which, I trust, you will find things both new and strange, and such as you will be able to regard with pleasure and favour with applause, for to their description and setting forth I have given all my heart and soul.

DESERT LIFE.

INTRODUCTORY.

DREAMING BY THE WAY.—A FANTASTIC BEGINNING.

A COUPLE of steamers and a barge took the party and their provisions from Cairo, up the much-described way, to the Second or Great Cataract.

As when a distinguished Oriental walks alone in London on his first Sunday—and that a wet one—tetchily melancholy, depressed in body and soul; and arrives at his fine but dreary hotel, and reads, in his warm bath, a note which invites him to an old friend's house, and after driving there meets several kind and cheerful Orientalists more hospitable than their Club, and is delighted by a plan of studies and a programme of amusements by which shapeless London is transformed for him into as delightful and comprehensive a picture as that polypetalous flower which stood in his boyhood for the map of the world; so fresh, settled, and cheerful felt our party on leaving Cairo after some protracted but indescribable vexations from various sources.

The genial sunshine (its heat tempered by the water), and the gentle airs which frequently blow in the early morning, seem to have a very soothing power on those who require rest. The sun's rays are known to have restored invalid desk-doters. The very birds, with their long wings, seem to take their swoop leisurely, with no more noise than the motley mosquitoes on the steamer, and the broad, winding "Jove-sprung" river itself—"a giant at its birth"—if not exceptionally panting under waves five and six feet high, lulls one into dreaming. One scarcely passes more of these spherico-triangular sails than if on the high seas, or living in the times of Icarus,—more celebrated on account of his folly than his father is remembered for his genius.

As you look round from the deck, you might fancy the horizon a cameo: the grand features of this dear old recluse—the mighty Nile—deeply sunk into the blank desert. His features are ruffled only at the rapids. His very overboiling he tempers into an act of kindness to his offspring. This is the only river that could have been embodied as he is in that lovely marble group at Rome, as a noble athlete reclining (after his mighty struggle with Phœbus himself), with a host of his diminutive fat children playfully sporting over his body. A fine old gentleman he is, compared with other rivers. But though some of his teeth—the venerable massive columns and other colossi—are damaged, that little furrow in his features, the crocodile, forbids mockery. What low-bred loons our rivers are: how roaring and brutal in their wrath when drunk. Parental Nile, affluent without affluents, in fifteen hundred miles runs his course through the desert like an exemplary camel carrying provision both for self and the men about him.

The protracted lethargic condition of the present Egyptians, after a succession of such thousands of years, seems to be the effect of that somnolence which long contemplation of grandeur would produce. With the hieroglyphics before me, I am tempted, amidst a swarm of other fancies, to recall the patriarchal age, and to dwell on those myths and fables which made beasts and plants to talk: as I muse about the unfolding of the idea of stereotyping, as it were, in imitation of fossils, the fleeting sounds of words by fixed images. It seems as if the Creator had, in order to teach archaic man, affectionately placed before him those pre-Mosaic stone slabs which, as soon as opened, became the seed-lobes of civilization.

. . . . . Here, in the course of my hesitating endeavours to make this chapter what the Egyptian trinity of Art, Science, and Religion is to its sequel abroad,—a fantastic beginning,—I am startled by reaching

"That point where sense and dulness meet."

Accordingly, after invoking the great spirit of intellectual lawgivers to keep me silent in the right places, I break my way through a whole army of crooked interrogation marks which, wavering high between variously balanced loads of doubts, have tried to tempt me off my task.

As I stand again firmly gazing at these pyramids, porches, columns, statues, and inscriptions—these crystallized mountains, blooming Adansonias, and tattooed mammoths, the creation of a bygone civilization, I find I am not pliant enough to be carried all the length of that scholar's enthusiasm who tells me in his book that one particular sight in Egypt will form *the* epoch of my life. But I cannot refrain from excitement and scarcely

from assault and battery when I see a modern savage defacing the relics of the past by scratching his name on them, a proceeding as foolish as it is improper.

In first wandering among these human formations, which, if not invulnerable, are at least not perceptibly changeable in the equal climate, we feel almost crushed by their grandeur and pained by their desolation. But as we get somewhat acquainted with them—say, by making some of the mysterious idols divest themselves of their animal masks, and smilingly come forward as well-bred priests, to talk on subjects familiar to us—we are surprised and charmed. We are delighted by this throbbing life, inspired with the same modern spirit of painstaking which succeeded in animating matter into machinery, and in vivifying humanity by reducing death-rates and vice, and working good deeds in a way ever more truly Christian, even among aliens and enemies. There, is the sculpture of a Pharaonic mummy being revived by its soul in the shape of a bird returned from its decreed cycles of wandering; here, are the people of Egypt,—and their ancient spirit is returning from Europe trying to revive them again. The latest scions developed through much cultivation, but sprung from those seeds of improvement which we may regard as obtained from Egypt, have been brought back to be engrafted on the old stock, in order that they may burst forth in more gorgeous flower and more luscious fruit than ever. May the old stock be treated with assiduous and tender care!

AWAKENING.

In the desert opposite Wady Halfa we disembarked: or I should say, were cast out. The transition was sudden, and the change great. For the last three weeks, or

thereabouts, we had a thorough holiday—and more than the usual comforts of a sea-voyage and a railway-trip combined. Now we had to tranship from floating vessels to walking ones—the camels. And besides this change, here our party were to separate into halves, for at least eight or nine months, and perhaps for ever. But we had a few days of combined work for preparation; and at our dinners we might exchange some laconic or spasmodic mirth. The Soudan, as *Ethiopia* is now called in Arab fashion,—though you translate the old word as "burning" or the new as "black" [as to skin]—is known as the Siberia of Egypt. Being regarded, and made use of, as a place of banishment by the Egyptians, what will it be to Englishmen? Given up by life-assurance companies, we were like a set of exposed infants, with only the chance of being saved by some strange milch-beasts. The mysterious treatment we received at the hands of some of our Caireen friends shortly before leaving, became now plain to us. We were looked upon as lost, and some remarks were to be construed in no other way but that we were never even intended to return.

And the place! The banks of this proverbially fruitful river, here and as far as visible, are more barren than a shell-less seashore strewed with wrecks. And in the river-bed the rapid waters are eddying, broken among the mazes of barren rocks. The changes inland, too, are not of life, but of destruction. Hills of sand, and heaps of rock broken and breaking into stones, characterize the scenery. The nearest semblance to life in the savage bleak prospect is the vehemence with which the very soil, forsaken by all, seems endeavouring to escape the place, or flee from itself, when stretching up its supplicatory hands at the top of the arm-like wrest-

ling sand-pillars. But stop, here is something reminding one of life, and that human: a spectacle of death unmourned, justifying the expression of dying several deaths. The characteristic corner is a decaying pedigree of decays: an ancient building full of hieroglyphics, all but buried under less antique ruins and natural débris. On the top is buried an Englishman, said to have died a few years ago—by his own hand. . . . "And forgive us our trespasses." . . .

We turn, and discover a spot, with a trace of life in the shape of one or two sycamores, probably planted in the time of the first Christians. Each succeeding year seems now only to split and bend them down more and more. In this prostrating old age their memory is weaker too: buried or effaced are many of the Greek names, and those of the Arabs of the "heathen" age, once plainly engraven in their bark.—Nor are pains taken to plant and tend any succeeding trees. What people are these whom not even electricity can stir? for the place is, after all—to use a European expression—inhabited: it is a telegraph-station, and—supplies an Oriental necessity—a caravanserai. As it is, it is hardly more than a series of mud-walls for a lean-to, something in the shape of flat clouds set on their edges for a time.

Another turn a little higher up, and, looking back, we see vigorous life among our two rows of twenty-four tents. We hasten forwards and take our share in the work. The first thing to be done was to attack some huge ramparts of boxes of stores which were packed neither by English hands, nor, in the hurry of our preparations, under English eyes. Accordingly, the continental flimsy, loose medley, we reformed and organized into insular, manageable packing.

One afternoon, after the champion-shot of the party, selecting the shade of my tent as the quietest place, had done trying his rifles and my nerves, and I was quietly engaged in the heavens—making astronomical notes—copying out, for reference, constellations of the coming months, formulæ, etc.,—there suddenly burst a shell of alarm in camp. "A meteor" I might have muttered in the train of my thoughts. The noise was that of a sustained fight between fiends and monsters, or dwarfs and giants, lions and elephants, on the one side; and of our soldiers and servants on the other.

There was no need to rush out of tent with a revolver though: a good tropical shower from a passing cloud would have been enough for these natives and camels, who had arrived in due time. The passionate affray among the new comers arose from everyone's hot endeavour to secure for his own camels reasonable loads from among the packages ranging about the camp. The puerile and feminine voices of the swarthy but fine fellows reminded me of Tasso's verses:

> "Peregrini perpetui usano intorno
> Trarne gli albergi, e le cittadi erranti.
> Han questi femminil voce" . . . .

And the rattling, querulous, thundering, growl of the camels, sounded much stronger than the voices of the smaller breed of Egypt.

That afternoon some of us selected our special camels, and took our riding lesson. Next morning we started in the caravan.

BOOK I.

THE COUNTRY.

CLIMATIC EXPERIENCES.

THE keenest interest, next to that of preparation and work, we took in the thermometer. The first effects of the climate, noticed during the early days of our rides was, that even the darkest of our servants were burnt still darker. The exposed skins of our white friends became glowing red, then white as bone, then they died off—the skins that is—when a brick-red hue supervened, a tint lighter perhaps than the complexion of the chief conquering race on these ancient Egyptian bas-reliefs: in fact it was the virgin complexion of the first lord of the Earth.* Our great surprise was to find the nights in December and January as cold as 45° F. on a rough average, never so much as 50°, and in three nights (Jan. 22, 25, 27) as near the freezing-point as 38½°, 37½°, and 36°. Those baths at sun-rise in the airy tents on the Nile shore *were* cold! My first annoyance was due to an error all are liable to. I asked, and listened to some one I had thought expert, persuading me to leave in London the furs I desired to bring. I am often favoured with advice of this kind before starting on travels and journeys. Such advice—

* This, according to Josephus' Hebrew Archæology: Ὁ δ' ἄνθρωπος οὗτος Ἄδαμος ἐκλήθη. Σημαίνει δὲ τοῦτο κατὰ γλῶτταν τὴν Ἑβραίων πυῤῥόν, ἐπειδή περ ἀπὸ τῆς πυῤῥᾶς γῆς φυραθείσης ἐγεγόνει· τοιαύτη γάρ ἐστιν ἡ παρθένος γῆ καὶ ἀληθινή. Though modern Britons, who know more Hebrew than did the Hebrew Josephus in the first century A.D., reject this pretty etymology.

when unasked—be it said in kindness—is highway robbery. As I and those like me cannot resist—being afterwards incapable of correcting our error—we crave forbearance. We whom Æschylus and Shakespeare called more persuasible than mulberries—πεπαίτερος μόρων—implore all human glow-worms to shade their piercing light for which we are dying. Temper your prudence with the milk-glass of kindness—into wisdom. And may our own guardian spirits still keep us from absolute knowledge! Being, then, defectively dressed, the piercingly cold winds—blowing during the first two months for several hours before noon—afflicted my flesh with burning rheumatism. (Rugs alone, specially cloth rugs, are "nowhere" in this weather.) This qualification of the expression "burning desert" does not seem generally known.*

We might have fared worse in these "hot" deserts. Snow does not, to my knowledge, fall and lay here where the *average* temperature is the highest on the globe;—as it falls and lays in Jerusalem, Algiers, and on some mountains of the Central Sahara—but frosts and ice stand recorded.† Duveyrier registers frost twenty-six times between December and March in the plains of the Central Sahara. Bromfield speaks of sharp hoar frost, and ice a quarter of an inch thick, at Rhoda on the Nile, 28° latitude. The Imperial Gazetteer says as much about Syene. Denham and Clapperton mention hard frost occurring at 13° latitude in the Sahara, or rather Soudan or Southern Sahara. Captain Lyon

* It seems not known, even to all the learned and expert gentlemen whom it took to furnish a stately paper on Personal Equipment of Officers, in a minute volume of the United Service Institution of 1879. They say offhand, one needs no warm clothes whatever in Egypt.

† "He destroyed their vines with hail, and their sycomore trees with frost."—PSALM lxxviii. 47.

records six degrees frost in the Libyan deserts, and adds frequent instances of temperatures below freezing-point—mentioning ice half-an-inch thick on several mornings. Similar statements are made about the neighbourhood of what is popularly known as one of *the* oases. These last statements were made in this decade by officers of an Egyptian surveying party, or as some of those appointed called it, a "German expedition."—No need, therefore, in these tropical winter nights to cool one's bottled white wines by covering them with loose earth and then burning straw; or of making ice in a still, dry, and clear night by letting water evaporate in a flat pan on dry straw in a pit.

But here! That rifle barrel is red hot from the heat. . . . . No: the great differences, through the greater part of the year, between day and night temperatures, were only just strong enough to squeeze out such a "soupçon" of dew as sufficed to veil our rifles with a faint tinge of rust, about every three nights. We had no dew recording instrument.

The daily North winds, peeling off nether lips and noses, were losing their ferocity by the end of January. On the 31st I have it recorded that it begins to get [feel] warm—about 90° F. in the shade. During the six or eight weeks of chilling winds—specially before noon—ending with January, the daily maximum varies between 71° and 92°. The very cold winds were relieved on January 20, 23, and 24, by sand-storms (temperatures between 41° and 77°), heaving heavy tarpaulined carpets to heights of two feet, like a rough stage sea made of cloth under which crouching boys are kept dancing.

February, at least the first half of it, seems to have

been a lovely month with us. The breezes were regular and moderate. It felt warm, and perhaps hot sometimes, but not oppressive to our seasoned organisms. Moreover, the temperatures throughout February undulated almost rhythmically between 51° and 64° at night, and 79° and 95° F. by day. During the latter half of the month—when we camped on the Nile shore near Khartûm,—the wind interfered for several days with taking a photograph of the camp, which was pitched in a thick palm grove and bushy gardens.

On March 1st, however, the wind became powerful. The day is marked in my small French diary, burdened with a useless geography, but containing irritatingly bad paper, as "Cendres." The sandstorm (54° F.) began at night and continued through the darkness; and in the morning we could judge of its strength, as our heavy levels, theodolites, and surveying-tables could not stand firm till 9 o'clock, when the air became calmer and thinner and warmer; indeed, the curve of maximal heat peaked as high after the storm as 97°. While the blast was at its worst, we felt gloomy and fretful in turns; relieved, perhaps, by thinking of the grand description of desert sandstorms in Lucan's Pharsalia. We started in the lesser storm with nerves strung as tight as those strong elastic bands which pressed down the crackling mimic musketry fire from the heavy leaves of our open notebooks.

Taking March as a whole, I find it to have been quite as distinctly marked and consistent as February in its kind. But there was more variety in March. (Day-maxima between 86° and 106½°.) The great movement in the range of the night temperatures, however, —between 48½° and 78°—was of no consequence; as the nights felt cool throughout the month, and the

evenings pleasant; although we noted the phenomena of clouded evenings on the 8th and the 9th. Up to the 8th there was little wind, and therefore the day-temperatures of from 86° to 98° felt as close as in the catacombs of Memphis. There were headaches in camp. On the 8th, with the clouds came a strong South wind; a comrade fell ill: the maximum day-temperature rose to 105°, and fell very slowly, so that at 9 o'clock at night it was still 90°; nor did it fall through the night more than to 78°. Next day, 9th, at noon, it was already 91½° in the air and shade [in the saddle-bag 112°]; at 1 P.M., and for nearly five hours 104½°, 101° at 6, still 93° at 7, when clouds showed again. Tormenting thirst in camp, only lulled during bathing and drinking and eating. A linen scull-cap with little holes embroidered, which I wear under my helmet, was given to the servants just before dinner after dark, and it was brought back washed, rinsed, dry, and ironed, when the coffee was being served. The sick man, however, who ate nothing that night, and little before, began to rally, thanks to small doses of champagne. People drew crackling sparks from their beards, before they supposed themselves dry from the bath. A poet might describe this electric phenomenon as combing out the last fire drops after the long past shower of hot dry light. This is that weather during which at night horses and lions shake stars from their manes, and whip off with their astrifex tails the terrified flies, or a scorpion. The vulgar author of the clownish "Münchhausiad," on the masterpiece of Bruce—half a century after the traveller's death, too—might have invented a leonine illumination, more fair and natural, by the agency of a little electric spark of ability, than he has done by first blackening the great traveller's memory

with a pitchy wreath of spleen. At bed-time, about 10 o'clock—such was the hot dryness—whole blankets, as they were being drawn one over another, or even slightly shifted, blazed up like sheet-lightning in the dark tents. These fits of diamond-like virtue occurred stronger in the hot nights of May.

Some time before this period we had exchanged our small bivouac tent, which had been pitched for our own lunch, for a large one. But about the end of March two more tents were raised for the short time of lounging lunch, to accommodate the soldiers and servants. The calm intervals between the hot gusts were oppressively hot. These gusts broke upon us in the wake of the waltzing sand pillars seen all over the threshing-floor of our horizon. After the sweeping tail of these familiar meteors had upset some of our tents, and the winds continued hot, we thought of camping in a captive balloon. . . . Where is my pocket-lore? . . . Ah, . . . The air cools one degree Celsius for every 187 metres in height etc. . . But by-and-by we managed to get up at dawn, and to have done with field-work before the afternoon glow sets in.—Of course matches were lit by touching the sand with them. People who worked their metal instruments without gloves—and every one except your effeminate servant here, did—got awkward big blisters. Even the mahogany tripods—unfortunately not polished—were painfully hot, and an eye-lid too near the brass work of the telescope was instantly baked into a pretty loaf. This was, of course, in the sun at temperatures between 150° and 180°, as will be further mentioned in the chapter or essay on Sky and Soil.

It is amusing to be told by a mediæval Arab who had travelled over these same rocks, of its being some-

thing like madness or tempting Providence to stir out of the shade after noon. Considering that moving in the day heat is not worse than constituting oneself an invalid every afternoon in bad tents, I am not surprised at the practice of some of our colleagues who were working from Wady Halfa along the Nile to Dongola and Shendy some years ago in a good season. After a very substantial late breakfast they worked from nine A.M. till sunset like the very jinns they were possibly supposed to be. A noble friend of ours, in sun-forsaken poor dear England, starting what he calls his work at midday, says this is "entering in medias res."

That afternoon glow felt sustained till sunset. I say "felt" because people's sensations were not commensurable with thermometric degrees—even if it were not the traditional custom, to feel in the sun and to measure in the shade.* Sir T. Douglas Forsyth and his colleagues made the same observations in the Gobi desert. The "fervent" heat certainly felt even greater towards eve. I would never admit it was because the heat preyed upon my strength, to speak with Dr. Johnson. The practically unabated discharge of the vesper rays† hit us everywhere as we turned about our instruments: only the tops of our shaven heads were properly protected—our soles were on embers, or rather our feet wading in a sand furnace. I sometimes felt as I did one night when lost in the brands of a fresh burnt reed prairie in Hungary—the sparks I kicked up with hot boots from under the soot at every step making me think of the shining nails in a black velvet coffin.

* But even sun temperatures, measured with black bulbs, are indifferent criteria of physiological effects.

† Because theoretically the heat of these rays is an insignificant fraction of noon-heat.

The lower the sun declined the more directly were our bodies smitten. On our faces the fiery rays felt like burning insult from a retiring enemy; on our throats like vicious throttling. While one is engaged in optical operations the attendant should shade one in the afternoon, not with an umbrella—we often spitefully scorned their use—but with a pavise, which should have a level, small brim on top, and should be cut into mobile shadelets or lids, into "jalousies," as a shelter, fanning, or admitting the Western breeze if any should blow.

The news chronicled with April the 1st was that it *smelt* hot—it was over blood-heat long before this—otherwise somebody or other "rather liked" the 109° between one and half-past three o'clock.

To begin with the nights, many of which were remarkably cool—one 50½°—there is no complaint on record; though the nights of the first week were indeed among the hottest of the period—over 80°. This passing high night temperature came in the van and continued through those three or four days before the 8th, when high hot winds from the East were prevailing—causing headaches. During these few days the sun appeared veiled and curtained. The first seven day-temperatures continued at between 109° and 114°. At the flare of heat on April the 2nd the amateur recorder pricked his ears. It was Sunday, and therefore leisure to catch the exact moment of maximum. This (111½°) was reached—some tepid wind, in long, low waves blowing—at eleven in the morning in the *cooled* tent. The tent was not refrigerated in gorgeous Indian fashion by revolving fans (punkahs*) sifting

* Valuable accounts of the latest improvements—let us hope, more fortunate than the name Thermantidote, for one—for cooling hospitals and railway carriages, are found in recent volumes of the [Roorkee] "Professional Papers on Indian Engineering."

draughts through constantly irrigated foliage or loose mat (khus-khus tattie); neither by Italian windmills chasing air from caves over flowers; nor even by Egyptian cooling chimneys and double tunnels. We simply had a couple of waterskins hung up against the breeze.

During those high hot winds (Khamsîn), under the pressure of dry mists or beneath the cover of sterile clouds, the atmosphere, as if confined in a pot, felt as though in a state of sputtering seething; though the thermometers, still primitive though modern, were far from alarming us by the dangerous temperatures vulgarly known as between 121 (in May at Esne, Egypt, according to Burckhardt), 122, and 133, which (or rather the unrecorded sun-temperatures corresponding or not corresponding) for weeks were killing poor Ritchie and trying Captain Lyon sore in the "happy" oasis. In desponding moments one would call this state a plague, during which each serpentine current of the air is hissing forth darting projectiles in the form of precious burning-glasses of transparent sand-granules, and shrapnels bursting into heat-gorged salt particles. (Whenever this heat is let loose, one feels as hot, and one's thirst is as irremediable as over the saltest zones of tropical oceans.) Under a clear sky, with cool Northern winds, the pointed particles are mere wild oats of youth, or feel like snow pelts from children. Indeed, I as gladly take the hot cornlets in a cool breeze as I relish cayenne and salt in some sweet fish sauce or cream soup. But, after that oppressed, incensed, and turbulent hot crowd,—fit to render royal ruby pale,—had passed, the calm, clear glow was refreshing, even though the obliging themometer was over 105°.

On the 8th of April "at last" (I should think every one was gasping) a cool wind set in: at noon only 103°, and nothing said about the day's private maximum of 109°. There is a serene blank—no wrinkles in the diary—till the 25th: only smiles of such words as "cool wind," "pleasant breeze all morning." On the 25th, however, "head-aches" are mentioned: 108°; nothing more, though it continued at this figure.

April and May, taken together, were hotter than June. The maximum of the year, as far as recorded, was 115° in the shade, in the beginning of May; but I am not sure whether the heat before, and after, was not *felt* more; especially while the hot samûm supplied the action of the cutting afternoon rays even at noon, and supplemented them after noon and before. The nights and the breezy mornings were generally pleasant: often the evenings also. *May 4th.*—At sunset and a little after, I lay prone on a very thick double rug, calculating, about six yards from the skirts of a tent, and heat registered 72°; and on the table, under the roof of the open high tent, the thermometer rose at once to 85°, which showed the power of unintercepted radiation in the then calm clear air outside. The noon and afternoon heats, even in the draughts of open tents, were somewhat trying, though not very much while one was yet able or willing to move. All dry objects in the shade were hot to the touch, indeed, the paper on which we were working, or the sleeve of a friend whom we might touch. This latter was sometimes an odd sensation, as it would make one half think that the other man is warmer than oneself. It would take much caressing and bathing to cool a hot glass. Forks and spoons were sometimes cooled by evaporating wrappers, like bottles of wine by damp

towels; or our levels in the field by wet paper slips, to coax the hiding bubble from under the bridge by changing its pout into a smile. The pores of our earthen water-jugs were choked with sand long ago, so that these had to be cooled like glass bottles. Even chemical changes were observed, of which I will mention one instance connected with the great evaporating power of perfumes. A hot silver spoon, in the safe centre of a large portmanteau, was found black one day from the action of scent which had all escaped from a bottle with a glass stopper tied down firm in a leathern cap. The full bottle, secured for transport by the manufacturer, was never opened. In a cooler place, in September, the empty bottle could be opened only after great and risky effort and many contrivances, during an hour.

It was when the thoroughly tired people in camp were dying for a snatch of rest that the heat was most exacting. The contrivances in India for cooling rooms down to thirty degrees below the ordinary shade-temperature, may act injuriously on people obliged to move much abroad; but we should have risked the change, some of us, if it had there and then been procurable. After you have lain for some time on the hot bed, or in the warm draught of your tucked-up tent on the floor, reposing in siesta, your head on a pillow of ghazel, your lair gets cooled down to the temperature of your body. The evaporation of the mark of one's head from the pillow aids this cooling. But if one did not feel, or resisted feeling *very* tired from work, one would prefer to lounge studying with a pencil, keeping the head up in the draught. Fortunately this play at headaches did not last beyond two hours; as after four, or half-past, the shade of the

tents was long enough to permit reading, writing, or drawing, prone in the open. The proper day-shelters in these places would, and for invalids should be large canopies, with four or more poles, each secured with stays, ten feet high. Two feet under the roof of thick light quilt another stout sheet of Bedawi-make should be spread, and the space between filled with skins. For a couch, the skin-net called an Arab bedstead, uncovered; for a pillow, a gigantic Maltese sponge should be procured, if nothing more porous and springy can be had. Walls should be light mattresses of whalebone shavings or desert grass (*alfah*), rolling easily both from their tops and bottoms. I think the reasons for all these arrangements against the marvellously piercing force of these sunbeams, and against stagnation of air, are obvious.

On May 13, led on by a chorus of infuriated "devils" (sand-spouts), we had the first RAIN, at a distance of 400 kilometres S.W. from Abu Gûsi.

May 20.—Hot all day, 103° in the evening; hot wind; unslakeable thirst; headaches; general state of nervousness, intermittent with apathy.

May 21.—Morning cool, 111½° at noon, 112½° at one, 109 at half-past five.

May 23.—Great shower—fearful wind. The water-jets felt, through clothes and a caoutchouc cloak, as if tipped with metal points. The country was inundated. The refreshing influence of this phenomenon was so gratefully felt for nearly a week that I find notes like "not oppressive" made against such silhouettes of temperature as 109°. Thermometrical tables, and our present state of meteorology, so long as not better connected with physiology, are very incomplete!

May 30.—Cloudy.

For the rest of the period under record, the heat was relieved and aggravated irregularly.

The average day temperature in June was lower than in the previous two months, yet kept above 100°, once rising to 108°; and the average of the minimum night temperatures was over 70°. The last ten *nights* of the month were exceedingly stormy.

June 5 and 6.—Rains.

June 7.—Clouds.

June 11 was clouded all over.

June 13.—Cool soft wind.

On 14th, day and night temperatures were the nearest to each other during the year, viz., 91° and 78°: it was cloudy in the morning.

June 28.—Great storm all night, spoilt everybody's sleep (wells of Kâjah).

July 1.—Wind. Very agreeable temperature; between 78°, 102°, and 80°. Lunch tent (on travel) upset by "devil," *i.e.* sandspout.

July 2.—Showers morning and eve. Quinine is taken all round as precautionary "bitters" before dinner—doctor setting the example. Refreshing to see doctor conform to his own prescription. My comrades are all heroes: they scorn accepting my insinuating wafer-envelopes, and take a grim delight in shivering for half an hour from the caustic bitterness of the powder. They might have been less tormented by some mild ague.

July 3.—Electric storm, and shower in the afternoon. Giddy, stunned sensations for several evenings.

July 4.—At night, gusty showers.

July 5.—Rain and storms all night. Broken sleep. Colds on chests, in throats, bad coughs, &c.

July 7.—Maximum 111°.

July 8.—Maximum 105°; gentle breeze before noon. Nocturnal storms always, breaking every tired man's sleep (fatigue dangerously excessive). Fearful thirst.

July 9.—Highest, 106°. Evening, rain with high wind. The gratefully accepted boon of these rains was "no stint of water for tubs." But the drawback kept on during the intervals also, even on clearer, cloudless days: the hot moisture of the wind prevented cooling, whether by evaporation of the water-skins or of steeped bottle-swathings. (We had no moisture recorder, I regret again to say.) We had nothing but warm drink, having slighted the idea of bringing an ice-machine, as our friends did in this neighbourhood a few years ago for a vernal trip when it was not much wanted.

The storms, truly tropical, whether sandy or showery, but usually prevailing or most felt at night, would tear and toss not only tents and furniture, but upset the heaviest boxes—(memorandum for some future designer of railway carriages in these parts). Pity we had no wind-gauges with us. Books, clothes, the articles in the dinner tents, everything had to be packed up and secured firmly before going to bed. Caught by such storms, our own caravan did not indeed crouch down and half bury heads; but few, if any, powerful and bulky camels could face the mightier squalls. Stronger than the greatest dry storm which once at midnight overtook us, and reduced each man's horizon into a bubble of his own height and his camel's length,—was a wet storm one afternoon in July. From a hundred yards ahead, instead of sky and air and clouds and soil, came a mass of indigo, deeper than that with which the Egyptians tattoo their skins, and calling to mind those latest chaotic productions of Turner which I have never yet succeeded in understanding. We were

swallowed in what was perhaps a mild tornado, with much noise, electric and otherwise. As soon as my camel, on whose monumental height "I was seated, a patient gurgoyle," was willing to turn ahead again, and the pricking of the rain, like volleys of pins and needles through my fourfold wrappers had abated, I found the darkness subsiding fast, with rather moderate wind in its wake.

July 15.—(Neighbourhood of the Wells Sotahl and Matûl.) Resting day. My usual exercise was hardly more this day than half an hour's walk over rock and sand; yet I returned—as most people would call it—exhausted. Bending to pick up a few of the larger amber-like pebbles from among the yellow sand, I felt almost stunned—such was the power of the noon-day rays on my back. Then I squatted down a few times with back erect, as if under infantry drill; but the radiation surging up my neck and face was so fearful that, rising, and almost reeling, I considered simple walking with my face in the 150° of the upper air quite exhilarating.

July 16.—High winds at night, as usual of late.

July 17.—Strong wind and rain. "Stuffy."

July 18.—From ten till five, 104°. Scorching and cracking of our skins. Baths, whether from the black iron tanks or the now not perspiring skins, scalding from accumulated heat.

On the Nile boat, at Dongola, 107½° both on July 19 and 20. Here I was reminded of the necessity of keeping dressed thick (though light), as usual, even under a stout awning of bedding. During an hour's lounging under this shelter, while dressed, for experiment's sake, only in a thin calico robe, more than half my body burnt red and smarting.

August 2.—Again on the march, northwards bound along the edge of the Nile valley; greatest heat, thermometer kept shaded from the sunshine in which we moved, 113°. Clouds. Rain at half-past four.

August 3.—Towards noon, and for several hours, 113° on the side of the tent. The thermometer was shifted at noon from the W. to the E. side and hung five feet from the ground. Breeze.

August 4.—Forenoon 113°. Samûm. Continuous parching thirst day and night: drinking makes no difference. Humming and whistling tried with some success, in remembrance of the good effect of Orpheus' music on Tantalus.

August 5.—Far from the river, in high desert, 107°, samûm always.

August 6.—Wind shifted: heat subsides—even the thermometer of centiped habits shows less, viz., 104°.

August 7.—106°.

August 8.—111°.

August 9.—106°. Pleasant wind.

The journeys, through the whole nights and some parts of the days—uninterrupted for the caravan—had widely differing effects on different characters and constitutions amongst the riders. There were instances of exasperated despair; and dogged despondency; and intense enjoyment of the fourteen hours' rides, which cheated even that chronic thirst. I myself was among those who rather enjoyed these bravours, selfishly speaking. At the same time I cannot but agree with Colonel Potto, the authority on steppe campaigns, who is most positive in condemning the ruinous practice of consecutive night marches. The fragments of day sleep on the hot beds were generally felt oppressive; and we seemed as if on the brink of serious maladies.

Yet we pulled through all this thirst and risky fatigue somehow, for a marvel. The snatches at the novelty of Nile-views, and the procurability of fresh VEGETABLES and other fresh food; whole hours, sometimes two, spent in full baths from the hymned river; an encampment or two in airy palm groves; a doze or lounge on a leather grate in *their* shade in the *open*, and perhaps, the proneness for "spurting" between last stages, may have conspired to save us.

At night, between the 9th and the 10th, hot north wind—the samûm driven backwards. Not only metals, but pommels of saddles, and other wood and leather, even the skins holding water, felt hot to an ungloved hand during this night.

August 10.—Hot sand storm, 110° on the precious thermometer, traditionally to be kept shaded as if in a vestal hareem.

Between 10th and 11th, and through the 11th, hot north and north-west samûm, very high. Several tents blown down. Choking sand, not mere floury dust or mineral pollen. Heat 109° among clothes in a trunk in the shade of tent; 111° in the wind among the sand accumulating on the shaded green tent-carpet.

August 12.—111°. Calm. Not unpleasant (for a change). Combs, vulcanite, bone, or horn, become brittle and useless; so that the shaving of heads, or plaiting and fixing the hair with varnish, appears explained. The demand for "angarîbs" (net-work bedsteads), as a relief from hot beds, exceeds the supply. At midnight, and some time after, while reclining near my excellent camel and a servant or two, I let the caravan pass by and heaped up a pillow of sand under my rug. The sand felt hot five or six inches below the surface, the surface being only warm.

restless already, would easily succumb under a prostrating hot storm. If, then, some phenomenal hot sandstorm, by deepening the cracks of the calcined skin and congesting the lungs, kill people weak by nature and further debilitated by want and fatigue, it will, we* repeat, not bury them under that little sand which may collect in six or ten hours, and which could be stopped by a dry bush. But if it takes the mere samûm a long time to kill even delicate people, the burial process by the creeping of the sand-dunes in moderate circling breezes is almost of geological slowness. Towns have been swallowed in Norfolk and Brittany and the Gobi desert by the encroachment of low sand-hills—each town, perhaps, in the lapse of a cycle—and they will reappear in the course of nature; the dunes passing on under the same law as the shifting sand-banks in a river. When the dunes are suddenly damaged in their sheltered depths by some irregular wind, the spoils disperse, and the dune does not move one step till the roundness of its tail is slowly reintegrated. This links with the next chapter.

I have refrained from detailing the third and greatest of the dangers due to the last season from the climate alone and our own sufferings and losses through it, and have deferred it to the sanitary chapter. I only mention that, however boldly some of us may have faced the first onslaught of the climate, the whole of our return journey, lasting for many weeks, was a justly alarmed flight, perhaps injudiciously precipitate; "an eternal rout," as Canon Cook, Her Majesty's learned and eloquent Chaplain, translates a passage in a series of Egyptian hieroglyphics.

* My authorities on the meteorology of deserts are too numerous to mention all by name.

SKY AND GROUND.

Our having had to travel south from Wady-Halfa for fifteen days in the Nile Valley on camelback, before facing the desert south-east and south-west, was like a gentle weaning from familiar life. The wide river itself changes into a desert, barren of ships, but thorny instead thereof, with rock-points for hundreds of miles of rapids formed by small cataracts. But, as in every desert, so in this also—there are oases; only on this Nile they are few, small, and sharply defined. In following the shorter — and, for the most part, the only practicable—ways over the arid brims of the plateau, the caravan does not, as a rule, see the river, except once in a day or two. The small hamlets we then see close on the gnarled river are like the pink-and-tearose figs sessile on the bulky stems and thick boughs of the Nile-sucking sycamores. Their harbours seldom float a boat, and if they do, it is for crossing only. But, for an irony on current navigation, one sees occasionally some foul bird plume himself on a quick-floating carcase—for corpses, animal and human, are comparatively frequent in this dangerous part of the river, which *looks* harmless enough to one who has not yet seen a village or encampment in alarm at the distress of a champion swimmer in mid-river. In passing by the villages of

mud-boxes inhabited by half passive, half "farouche" people, we inevitably come by the low grave-yards, well out in the glare, with rough paving-stones for monuments here and there near the flat pebble beds. A scull is sometimes, but rarely seen at the ends of these pebble banks. Not a domelet, not a wall, not a carving or scratch with a meaning, and not a root with dry haulms is there to remind one of affection or of resurrection.

During one of our first journeys, when struggling across rugged heights and sandy depths in an undulating horizon, which made me think of the blank scenery of the moon, a camel dropped, was unladen, and, I think, shot in mercy. Its bones will soon get unfleshed like those of scores of others which daily checker our paths in this borderland, which is much more frequented than the desert proper. Brave animals are camels: even anticipating their end, they allow themselves to be harnessed to die in the battle of life.

O, Nature is busy still! See the strings of vultures making for the fallen—and it would be extraordinary if another eager agent—from the "States"—would not come to continue the work on the skeletons. [A year after this crossed my mind, some "citizen" did fetch those bones.]

The undulating and broken flow of my narrow horizon expands on a flatter table-land, haunted in broad day-light by the ghosts of a sea. It is hardly a century since these mischievous ghosts lured to death some regiments deaf to their guides' warnings. Speaking of this mirage, I once half-dreamily asked myself whether those dry light clouds we see sometimes in accumulated tufts are not merely mirage.

. . . . You are right inferring that these very deso-

late beginnings in these three chapters—impending climate and ghostly scenery—must, to suit with nature, develop into some pleasant sequel: unless the most acute, and chronic, and fatal of all calamities in nature—human perversity let loose—does not spoil whatever ground for joyous praise may be in store.

Turning away from the river, after having received into the hitherto dry flow of our caravan the tributary of the water-laden camels, let my species of Fata Morgana present before you a dissolving view of something real, gleaned from the scattered features of our long race-course.

At sunset the sun, the lower sky, and the earth are cleared of their mistiness or chaotic light; and, with hardly any glow on sun or sky, every object in the landscape becomes defined. All elevated surfaces are lit up as if by intense foot-lights, appearing thereby as if really drawn upwards; and outlines, ere now lost in the general glare, stand well out like muscles awakening to powerful effort. This effect—almost sudden—which draws our attention to the new flashes of light when its source is all but gone, brings to mind the first jerk of one's ascending camel, which projects one's head with force. Such objects as pointed hillocks, to all appearance actually rising, recall, by their edges, raised hands joined in evening prayer. At sunset, then, "when all Africa is dancing," ranged in advancing columns along what we may call meridians, we naturally turn slowly about, trying how far we may see the checkerwork now raised by this singular light. . . . . Then we almost start as if under a shock, our head jerking a little upwards, as when our camel gives us the final shaking lift in the saddle. For the upright lights on a camel, a tent, a Bedawi, a bush, and a vista

of scattered sandheaps and piles of stone now suddenly dive, anon jump—no, dive, go out, and, being extinguished, each sends up sparks—the stars. Very intent, I feel with the upward movement just as nervous people might feel on a camel rising: as if the earth were falling from beneath me, and I were comically fain to catch at the nearest object. My eye then, when the earthly lights suddenly vanish, catches at the "nearest," lowest, star; and, after feeling rescued, climbs to higher constellations.

I fancy myself in a new world, and as if tossed up into a sphere nearer to the stars, from the effect of their sudden and distinct appearance close down to the horizon, as soon as the sun has set. The quickness of all the other stars arraying themselves and breaking upon our sight in full lustre is likewise a new charm to me. By the time the Southern Cross appears, we see it singularly clear in spite of its low position. It does not here seem like something grand in isolation, but forms only one of a crowded assembly of constellations and groups, less defined, but more thronged. There are, at least, three grand constellations, all cruciform and even larger than "the" Southern Cross. Such old friends as Orion—the "camel stallion grazing," as he moves in the heavens—whom we can see all night, and the moving throng of the galaxy appears as bright as if just burnished in the sharp sand, to speak in analogy with a Homeric expression. Some of us noticed even more colour in the stars, and others said they distinctly saw the candle-flame like mist (imitating the aspiring ground lights just gone) of the zodiacal light, the nightcap-like extinguisher of the sun, just "gone to bed." I will not say more about the playful moon beginning Orientally supine, and making faces as else-

where, than that De Quincey hunted up evidence of her here "burning" exposed peoples' skins. The belief that the moon here causes severe eye complaints, and even blindness, has been modified by referring the cause to the great chill caused by radiation. In the open air of these deserts, even when the moon does not shine, the eyes should be kept during sleep under a veil. On the other hand, the chemical effect of the moonbeams on minerals in general, and on desert rocks in particular, has been shown, I think, in the "Comptes Rendus."

The celestial compensation for the earth's poverty is indeed generous; although even this poverty is susceptible of widely various estimation by different minds. Many find ample amends in the glorious sense of liberty in wandering through these Aleian plains, with hardly ever a thought approaching to melancholy Bellerophon's feelings, whose eyes must have been fixed somewhere under his chin, like the eyes of an isopod crawling on the sea-bottom.

People here are always in company—indeed, too much so, according to general complaint—and live constantly under pressure. Even a postilion on his trusty camel, racing on for twenty hours at a stretch—awakened by a burning slow-match tied to his foot—even he finds companions. Greeting them, he converses, during his manly achievements, with the friendly features of soil and sky. And the features of this desert soil, as we shall see by-and-by, have for an old acquaintance the poetic charm of some new, mobile expression at every meeting. Not a tenth do people in the desert feel the solitariness of an average bachelor in town, a place which belies its sweet name of a metropolis. The most kindred thing—if it is not the same—to a great city is,—in the eyes of those hundreds of

thousands who care neither for what they may have of so-called society, nor for crowds,—the pagan Hades with a touch of other infernoes, as far as brute noise is concerned. The human forms, for all practical purposes, are walking mute shadows, unless to those noisy few who, Ulysses-like, have a mind to collect, and can afford to collect, select, and dissolve the lips of such as they might choose—making them talk by the flow of frothy riches, or sparkling success, seasoned with the necessary grace of manner, and tempered by the humour of human kindness. But I am straying; and it is a pity to do so from a well-appointed caravan, or from the landscape and the life in it about to become miraged before us.

In about eight hundred miles which we levelled, I found only one single straight stretch of eight or nine miles really plain and almost level. All the rest is a quick rolling of billows, each about one or two yards high and a hundred yards long. The two hundred miles from Abû Gûsi south-east to Khartûm are heaved into several high ridges. The caravan route itself, though selecting the lowest ridges, winds like ivy on inclined thyrsi, climbing up and down along slopes of, now a hundred, and again a hundred and fifty yards in height, counting from the bottom of the lowest valley. But the main and all but steady rise to the south-west to the chief place in Dar-Fûr, is merely one in two thousand —also corrugated by waves of one or two yards high every hundred yards or so. Even the flattest stretches of the plain undulate to this extent. The whole horizon in this country of extreme temperatures is rolling with mounds from a couple to scores of mètres high. And so thickly are these ruffled plains covered with isolated hills and hillocks, that they resemble a grater, or my

goose's skin covered with pimples when shivering in the morning cold, or shuddering with heat at noon or eve,* or when afflicted for weeks or months in the Nile Delta with prickly heat, agitating the burning skin in the ebbing and flowing billows of a mimic earthquake. In conformity with the "Nile-boils" usually lingering at one's foot, the hillocks would, at rare intervals, consolidate into table-lands of a journey's length and breadth, or more. The tops of these plateaux have the same rolling surfaces as the plains. At some places not generally visited, the soil of the plain is abruptly sunk into wide cisterns—well-defined, saline dry lake-beds—many with nooks of unexpected vegetation.

Besides the ordinary mountainous districts between Dongola and Khartûm, and the table-lands, depressions, cupolas, and pyramids of these plains, we saw no characteristic features. Certainly I never found here any of the natural obelisks, or rather pillars resembling termite towers ("white-ant-hills"), so characteristic of other African deserts, and called "Witnesses"—supposed to be left by some geological flood "like navvies leave pillars" for measuring the depth of their earthworks. But many of our pyramidal or conical hills may have been transformed from those desert-beacons; for the generality of these rocky hills are, properly speaking, not hills, but heaps—piles of boulders, stones, pebbles, or sand.

Those of the dark porphyry masses, which had evidently cooled after their molten state, level and confined in some craters, appear indeed little broken by present agencies, and only made to look like unpolished leather by the friction of the blown sand. Yet its

* What a delightfully shivering place for a certain class of novel writers.

surface is, perhaps, more like that of a corium—like sherds soldered by the lower lava. Reminding one of the "sea of glass mingled with fire" in St. John's Revelations, these flat places look as if once slightly crusting a molten mass; and as if that crust had been broken small and tossed about, and then consolidated again into a "porcellanate" surface. These consolidated tile-fragments are relieved in several places by circular fences, six or ten feet wide or wider, and defined by three or four thicknesses of upright sherds, ranged in rings like the funeral wreaths carved or soldered on slabs covering graves. They look as if arisen during the eruption of some mighty bubbles, or as if broken through by some meteoric boulder.

All the other rocky hills I ever noticed in these deserts—except perhaps some of sandstone—are sharply broken, usually into rough, angular fragments. And many seem a heap of stones sorted into sizes, as equal as if they had been worked upon by some huge sifting rock-disintegrators.

Admirably done are these stones in Her Majesty's Scotch limner's latest and grand picture "Satan watching the Sleep of Christ in the Wilderness of Temptation." Though deserted by the fashionables of the day, I would not give this picture, with its power from its complete unity, for the whole Academy exhibiting at the same time. Professor Blackie, in this case, surely says not too much, "Sir Noel is a man of ideas; he might have been a great poet if he had not chosen to be a great painter"—*Ἔστιν ὁ ἱππεὺς Νοὴλ ἀνήρ ἔχων νοήματα· παρῆν αὐτῷ ἐνδόξῳ γενέσθαι ποιητῇ, εἰ μὴ ἐτύγχανε μᾶλλον ἀγαπῶν τὴν γραφικήν.* But the following lines speak for Sir Noel Paton's being a poet as well:

"Even as a vulture, bird obscene, from far
Tracks the sick wanderer from the woolly fold,
And perches near, with ravening eye accurst;
So stole in silent rage the baffled Fiend
To where the Saviour on His couch of stone,
Foredone with conflict, slept; so, in his breast
Revolving subtler treasons to entoil:
His erewhile Conqueror, sate he moveless there
The live-night long. While as the Holy One
In troubled dream traversed his wiles once more,
Bruising once more the Serpent's head—as told
From the beginning: the Eternal Strength
Made perfect in His weakness; while on high
The starry watchers round the unswerving Pole
Wheeled in bright squadrons—and the dawn drew near."

The machinery by which this stone-breaking has been, and is still being done continually, is remarkable enough.

Earthquakes, in these volcanic regions, do here more visible havoc than they would in places covered by elastic soil and thick vegetation.

But the most powerful agent of disintegration is the change of temperature to which the salt be-sprinkled rocks are exposed. With a pocket-thermometer, intended for theoretical "shade" temperatures, I found the sand in which we walked, sometimes 146° F., but with a better instrument for measuring practical, direct heat in these places, where shelters are a myth, 170° F. might have been obtained, a temperature found recently at Jaffa,* as coming nearer the truth. Duveyrier, equipped suitably to his purposes, found the Sahâra one day over 182° F., or 73° C. The same authority registered within one year no less a difference than between 163° and 20° F., or — 5° and 67°·7 C. Mr. Harding, according to a paper read before the Royal Geographical Society, recorded at a spot of the Atacama

* "Climate of the Levant," in *Blackwood's Magazine* for March, 1879.

Desert of Bolivia 7° and 98° F., with only four hours time between. These are annual and diurnal ranges with a vengeance, and are enough to make that Colossus at Thebes groan audibly. The Ancient Egyptians did well to mass, round, harden, polish, gild, keep dusted, clothe, mask, and shelter their huge sculptures. And not without good cause had they a predilection for light granite and dark basalt, so hard that sculptors of our time still wonder with what instruments they could have been worked: till they improve on hints from those who work on glass and those who fashion diamonds.

Besides the heat acting upon these calcarious and quartz rocks and upheaved porphyry, there is the roughening, depolishing action of the wind-borne sand. The dusty sandy gusts grind rigid windows in more sheltered countries into opacity and often iridescence. And these fiercer blasts depolish even the elastic eyeballs of the Bedawins into blindness, compensated sometimes by bringing out the iridescence of the soul—poetry. Judge then how easily these winds which remove in one dry season the polish off the upper faces of these rolled, hard pebbles, will roughen the ordinary rocks, and so accelerate their destruction by increasing both their absorbing and their radiating intensity.

But the sand does more than this: it gets into the chinks of rocks and eats them through. It will penetrate, like damp and ponderous gas, into capillary fissures, and, slowly accumulating, widen and deepen all clefts. I really believe that mineral breath goes working into the very pores of the rock, as it would penetrate into a cooling bird's-egg through those same pores which exhale a "bush" of bubbles when the

certain conditions might render the ferruginous stones, and other minerals, active magnets.

Researches on the alternate action on the rocks of highly ozonised torrid dry air charged with electricity, as shown before; and then of the air in its deozonised state during hot storms, would also well repay labour.

We should pause before decidedly rejecting—as has become the hobble-de-hoy fashion—so many testimonies of phenomena observed without scientific preparation. The generality of sand- or "dust"-spouts, known from Australia and Gobi to Dar-Fûr, and the Atlas and beyond, in the deserts of Brazil, Mexico, and Bolivia, is harmless enough—to recall from memory a pun of Aristophanes, often strong enough only to make wool fly off: ἐριώλη: ἔριον, ἀπόλλυμι. Different from these are the desert tornadoes, radiating to great distances heat and pungent smells; and snatching up and throwing about bedsteads, saddles, quadrupeds, men; and piercing two camels through and pinning them to the ground with a blunt tent-pole or a stake; and stealing soldiers' metallic weapons, and sending them down from the heavens in other latitudes. Have a day's treat and compare the imperishable description in Lucan's "Pharsalia" with the rich account of a recent Illinois Tornado in the "Journal of Science."

The action of even the most fleeting showers of loose-clustered big drops of icy cold rain (which I said before I have felt through a thick and hard dress, like arrows), or hail, both from untold heights, discharged with a momentum approaching that of pistols loaded with water, is the more powerful here, as they almost invariably fall on the rocks when they are most heated —in summer, by hot winds, and in the afternoon.

Disintegration chiefly by chemical action comes into play in greater force during and after the rains. The fermentation of lime and gypsum, the dissolution and crystallization of nitrates of soda and other salts—condemned to this drainless continent—mines and blasts the rocks in every direction.

Nor are the stones of these piles, once rock mountains, left to tumble over into further decay at the leisure of their gravitation. Down from a heated height, greater than over any part of the earth, burst the sudden cataracts, in which excited lightnings are diving headlong.

As the irregular Bashi-Bazook manages to find, and gather taxes from, the most retiring Bedawin tribes, so the stone-heaps and sand-piles, however poor, are made to pay their tribute, diminishing in rolling, annually, or otherwise, into the depressions of the soil. Mountains of stones, and of mighty boulders, the size of tents, would, in the torrential inundation, sometimes vanish; to be, perhaps, piled up against some distant bar, or scattered broadcast. Slipper-shaped high dunes —though their shape and situation is a powerful protection—nay, whole ranges and districts of thronged sandhills, would be swept away in twenty hours.

As, then, the cloud-descending, tumultous roaring caravans of stones, with their loads, are disgorged into the main valleys or plains, they toss and shake, and break, by their rolling gait and violent stamping, their brittle loads to the utmost, like real water-holding camels, till they, subsiding calmer, deposit rough fragments of limestone, porphyry, granite, and quartz. White quartz blocks, and large pieces of petrified wood, both of these freshly moved and splintered, are very commonly lying about. The petrified logs especially, as if conscious and still

proud of their descent, nobler than the brute stones with unorganized veins, would rather splinter and break, than behave like the "rolling footed" driven ones. But even the other fragments which are obviously depositions from the last stone-breaking rains, look uncommonly rough, splintered, angular, sharp, and as thorny as the vegetation of the place—the phraseology of a hasty treatise on an unripe "theory."

True, to relieve the material in such phases, there are the gentle sands in the depths, and the shingle-banks like half-buried tortoises, again conglomerated by new-born clay: others are pristine conglomerates newly broken up. The pebbles, the shingle, the smooth rounded stones, and polished boulders in these plains, I believe to be the product of other ages, most likely geological, and think that under our own eyes they are but shifted, and that very roughly. These little-draped stones and provident sands distinctly corroborate the conclusions which Frisi has drawn from his hydraulic researches regarding the perennial rivers of Italy. These stone kernels must have broken loose, during the short rushes of deluge, from long baked and compressed conglomerates; and the finer sand must have lain collected and then been shifted here for untold ages, when there were perhaps perennial rivers, and pounded from the more brittle of these ready sandstone rocks—made brittle, may be, as a Prince Rupert's drop, by some sudden geogenetic process, during the infant maladies of the Earth. Nay, it looks as if the present impetuous waters would break the very pebbles, or, with lesser force, at least deface them of the polish acquired long ago. The mountains are too low, too isolated, gorges too short and rough, the plains and torrent beds too flat, and—what is still more important to judge by—

the supplies of the rain too abrupt, and may in former centuries have been rarer and shorter and more violent even than now, to produce that smooth rotundity which —except in confined whirlpools, of which further on— is the effect of long sustained toil. The waters, besides disintegrating, collaborate with other forces which reintegrate by accumulation, pressure, baking, and chemical compounding. But the rounding and polish of the solid rock requires perhaps as much time, and as continual an application, as the ripening of the soil for rounded and smooth organisms. If a constant succession of drops, falling, as a rifle-bullet flies, in a screw line from these heights of clouds, could be secured to work on single spots of stones, it would not smoothen a round brim, like drops from low-built eaves, but pound sharp, like a bullet, or pierce like a gimlet; or, under oscillation, punch pock-marks, and drill combs. Witness the rough, fresh, perpendicular ravines, toning off with colours ranging from dark violet and purple, through hazy hues, to pink and rose and fresh snow. Moreover, you see the marks from one short sprinkling eaten into the hard ground, stereotyped for years, and slowly filling up with travelling dust.

Scaly and spiky dust, then, is what is constantly being made in the thorn-producing desert, parched or inundated; it might be called the salt ashes of the burning desert. The waters begin by bringing down much of the dust,—meteoric in two different senses. Then they make new dust. Then they screen it between the stones, and through the very sand; and, thus sorting, aggregating, according to size and gravity, lay them at leisure in clay, derived from heavy porphyry, ponderous granite, meteoric iron, and other débris.

The drops, hurled from the maximum height of rain

clouds, as Sir William Herschel explained—and moreover weighted by the ponderous dust they snatch from the high, galloping winds above—these racing drops often combine to form twisting jets, like snakes, hissing out forked tongues of lightning, before they reach the ground on which they burst at last as plaited, clustered cataracts, in a sudden and tumultuous manner.

Long after the mighty efforts of the waters are over, their minute trouble continues; but this diminishes as the circling, curling puffs of sediment glide, like shoals of small fishes, in coils into convenient niches, as camel-drivers huddle-up behind the new-moon shaped saddle-shelters; or as pairs of dancers, after a long, straight *chasse*, arrive at the place to turn again. Becoming thus gradually unloaded, the waters roam and run about, dispersed in playful curves, amid a maze of petty channels found in the rocks, or traced in the fresh soft ground; doubling native rocks, great nomad boulders, and those well cemented, termite minarets ("white-ant-hills"), whom Neptunine fury alone—even helped by smaller catapult stones—could not destroy. These metamorphosing waters sport on, with occasional jumps from a bar down into soft sediment—like children romping in a huge bed,—then down a mimic cataract, tossing up liquid feathers or shuttlecocks, until, tired of continual excitement, and just as the last shreds of the high cloud canopies vanish,—as if a mighty animal shook a wet mane from before his eye,—revealing the angry ogre of a sun, they fall asunder, huddled up as drops, nestling in the down,—many of them smothered and gobbled up by the ogre though . . . . and then they skip *under* the bed. But if you go noiselessly (which is easy in the

detaining sand), and dog them close, you will catch some roguishly awake, looking up with their open eyes from the depths of rejuvenated *wells*.

In some cisterns, and ancient craters, it would appear as if the waters of the floods, even while in full force, were playing at ball, as they chase round in flat screw-coils. Belted by higher hills, I have mounted one apparently consisting entirely of a lofty pile of hardened equal sandstone balls, the size of peaches. They were as nearly globular as anything in nature—a bubble, a drop, a planet. They might have been formed like children's "marbles," made by whirling round with accelerating machinery a barrel filled with water and rough stones. They must be cemented with some tough ingredients, as they were excessively hard to break.

Of rather a funereal aspect were pale sandy hill-sides, and the plains near their feet, strewn with those orange-sized nuts of the surface-blackness of iron meteors, known all over Africa as "manganese nodules." The ferruginous dark shell, easily broken, is the thickness of orange-peel. The kernel is sandstone, very soft, of invariably the liveliest hues, from light yellow, through all the colours of the rainbow, to deep purple. Duveyrier informs us that the veil-vizored Touâreg in the Sahâra "heat these nuts and throw them into milk to preserve it by the iron thus absorbed." Thus—to fix this jewel of research in a clumsy setting of my own, as I object to quoting like a parrot—the community of castes of whey, cheese, and butter, is kept in sweet harmony, when all are imbued with the same stern principles of iron duty.

Before speaking of the wells, often simply tapering holes in the subterraneous rivers of the deserts, I

will describe the sandiness of those parts we passed in particular. We met no ranges of sand-hills, those moisture providing milk-breasts, adorned here and there with bouquets of vegetation, and extending over many degrees of longitude and latitude, as seen in the northernmost parts of the Sahâra, and others of lesser extent imperfectly explored in the Libyan Deserts. Therefore our wilderness was more barren than the better known parts of the Sahâra, which, it is well to remember, were the seats of an important civilization in antiquity. The astonishing subterraneous aqueducts in the rocks of the Sahâra originated with the ancient Garamantes; and they might have been the first models of water tunnels made by man and imitated in more famous countries. The dunes, blown and rippled and curled on the surface, by the weaker waltzing whirls of the ruling winds, appear in the shape of watered-silk slippers filled, as far as can be, with sand. They are not numerous here. They are enchantingly attractive for those who are impressible to their shape and movements, so multifariously suggestive of showy physical processes, organic forms, and life. But we will publish here no researches about them, lest by so doing we swamp all the architecture of the following essays. The greater portion of the sand, often much mixed with clay, is laid flat in the deepest places, and is now and then heaped up irregularly, or arranged as described under the head "Animation." For long stretches it is only inches or fractions of an inch deep, and does not hide half the rocks, stones, and shingle, even in the lower parts of the plains traversed by us. The uncovered rocks are only made to shimmer or glitter by sprinklings of sand and rock-powder. But the air, even during its calmest breathings, is charged with

the shining heavy motes of rocks and salts, which penetrate like tropical damp into the best secured boxes. During the calms of winter nights much of the powder comes leisurely down from prodigious heights, as a sort of dry dew. Aware of this sublimed sand, I am tempted to call those waltzing sand pillars rather whirlpools than spouts; though they are said to arise from the ground, creeping along at first like small twisting horns of smoke.

The first desert village we saw, after many months' rambling, was at the watering-station of Um-Bahdr. This was one in a group of several villages. After about a week's journey, we saw the second and last group of villages (near Kahjah). The huts of the first cluster were square straw boxes of thin walls and layers; the second cluster boasted of cylindrical walls of thatch or stones, with hoods of thatch for roofs. The villages seem to be as gregarious as the deer, and as patriarchal as men. None of them are in the valley: they are all careful to keep high on the hills, and away from the wells, and would rather have a constant service of water-fetching women and beasts than be as imprudent as we boasting Europeans and other barbarians are, who court pestilence by camping *at* wells. There is much mischief for fools and the uninstructed lurking in those goblin eyes.

Addendum to the paragraph on grit balls on page 46.—According to a communication to the British Association in 1879, by J. Andrews, F.C.S., there are concretion balls, between the size of a nut and the first, formed during a couple of weeks in a mineral water in which probably eddies are turned by the steam passing over the surface and heating the water to 164° F.

WELLS AND THIRST.

EIGHTY miles, a hundred miles, ninety miles . . . . . four days, five days, four days (eight or nine hours of them) . . . . . These three lengths between the neighbouring wells on the central stretch of our operations do not sound very formidable. Our pious young desert express (when pious they are all young, like the gods!), on his whirling camel, often ready to do three or even four times the daily journeys of a caravan, seems not to be concerned more deeply than ourselves would by crossing—Inshallah!*—a calm midland sea between (say) Alexandria and the arctic of Lebanon. Four days, five days, four days. . . . . We have plenty of sound water-vessels, and our camels are often watered at handy wells only as a measure of precaution. Suppose, as often happens, we find one or other of the nearest wells dry? . . . . . Well, it would be a question of nine days' thirst, which the ghost of the Persian expedition from Thebes might tell. Our camels—here in the Soodan, at least—would think nothing of that in winter. On January the 26th, 1876, when our camp was two hours' journey from Beer (well) Sotahl, and the camels had been seven days without water, we had to compel the drivers to water the animals. The drivers wanted

* "Please God," used by some instead of the frequent "Yes, yes," or such like, when listening with very great concern—to some plan, perhaps.

to go on another three days, when the delay at the wells would have most awkwardly inconvenienced our work. That they could easily support thirst for ten whole days they showed after the very first start from the Nile. They were taken hale and merry to the wells (at Matool) on January the 15th, after ten days' thirst. True, that during this they had a rest-day or two, and during each of the others they did not march more than we advanced with our work. After such an introduction, nobody was surprised to see the animals live without drink for eight or nine days. No difference in this reserve power was noticed between those breeds we took from the districts about Dongola, and the others which we got at Khartoom. Indeed, their breeders said that the camels could go a fortnight in winter without stopping at wells. The awkward thing is, that it is during the seasons of hot nights that the excellent animals are tried most, by the drying up of the wells. Besides, there are unforeseen delays among people who cannot boast much of the rare genius for organization. Our work, in particular, put the poor brutes to a very severe test. It took us three weeks—it would have taken the best of Germans six, and Frenchmen six-and-twenty—to get our particular operation performed on that stretch of a hundred miles. At one period of this work, during full twelve days in the first half of May, when the day temperature was the hottest of the hot year, two-thirds of our camels were without drink. Two of them, I believe, dropped, indeed, on their way and near to the wells, and had to be subsequently rescued by being watered from the skins which were first filled. The calculation between ourselves and the camel-men as to sparing the animals unnecessary running to and from wells was thus almost too close; but, of course, it had

been taken into account—for what it may have been worth—that for ten days *they* did not work, perhaps, more than about six hours a day, loading and unloading included. We men did our best to economise water, by each of us washing from a basin only, put into the tub. And the brave Bedawins reduced their thirst by abstention. They kept this asceticism secret, though; evidently to save their camels from driving blows. One of these excellent fellows wanted more drink than the nicely-balanced uniform share the rest were content with. He had more work to do than the rest; for he served one of us as groom during field-work. This poor fellow could not refrain one day, after helping his patron to dismount in camp, to ask a drop from the latter on the sly.

Some people may consider these jealously checked statements about the camel's sobriety as being beyond those made by most authorities; others, impressed by some recent corypheuses, may think these particulars tamer than what they expected. The statements of the latter authors (of many years' recent experience) that the camels *can* go several *months* without water, ay, and also without food, we will lay on one side. The other statements, even more recent and pretentious, that the camels cannot live athirst beyond a week, and that "most camels die, if not watered every fourth day," we will put by the other side. And now let us venture to associate our own evidence with that of others to justify and explain the simple statements of the foolishly despised Bedawin witnesses, who told many travellers besides ourselves about their own camels' capacity for supporting a fortnight's thirst. I suppose it is understood that there are camels unprovided with water-storing receptacles, which are not able to live away

from rivers or close chains of wells. Arabic scholars will, presumably, know that among the Oriental wealth of words referring to the camel there are names of breeds denoting degrees of abstinence from water, names for breeds which require to be watered every third day, and so forth, up to ten, and "*twice-ten.*" This last fact was noticed, I believe, by General Chesney. Rearing breeds capable of going unwatered twelve days was considered, many centuries ago, by Arab experts a handsome success. But it would seem that the numbers as well as the qualities of the breeds have constantly kept improving, if we may judge from fossils, ancient descriptions, and sculptures, and some of the latest intelligence about the wild herds in Tibet. Of course, the camel is not the only sober mammal.

I do not see how the other animals of these deserts could manage to drink very frequently anything but the juices of their food. We have passed over in our mind those typical representatives of the learning of one nation, whose sons are in the habit of advertising themselves as *the* profound ones, and who would—to keep close to the present subject—go home from their desert surveys without levelling a dry distance of a few days' journey, because, forsooth, it is their dogma that "the" camel's extreme abstinence from water does not exceed a week in winter and three days in summer. These dogmatic conceits and "theories" are not to be shaken by what the breeders themselves timidly assert about that fortnight; nor would they be shaken, from what I know of their character, if the very camels themselves were to speak out. We have politely declined to take *au grand sérieux* the minced and seasoned official reports of the marvellous, as kindly presented by typical scholars of another nation. But we

will seriously mention some vivisecting atrocities, relatively worse than those of the Spanish Inquisition, done in a country "irredenta" from the charge of murderous cruelty to these very days, where cabinet ministers are cowardly assaulted, and maimed, and half-killed continually during several days for a purse of gold. Let me quote, then, a page of Francesco Redi, referring to some experiments done two hundred years ago. (It is fortunate the great Athena had turned "the distressing conceits of his baneful joy" — *δυσφόρους γνώμας . . . τῆς ἀνηκέστου χαρᾶς* — from men towards brutes, as she did the madness of Ajax.) In the dissertation, "Osservazioni intorno agli animali viventi che si trovano negli animali viventi," he says :—

"Un' Aquila reale campò ventotto giorni senza mangiare . . . Gli animali non muojono così prestamente per cagione del digiuno come crede il volgo. Tra' cani, che ho fatti morir di fame, vi sono stati dei quegli, che senza mangiare e senza bere son campati trenta-quattro e *trentasei giorni*. Un piccolo cagnuolo ne' giorni più caldi della state arrivò fino a venti-cinque giorni senza bere e senza mangiare; e molto più oltre sarebbe trascorso, se spinto dal gran rovello della fame non fosse saltato da un' altissima finestra [poor brute!]. Un gatto del Zibetto . . . . . indugiò a morire dieci giorni, e un grossissimo gatto salvatico ne indugiò venti. Venti giorni mi campò una Gazzella. Un Tasso in tempo di Verno campò un mese interno. I Topi domestici e campagnuoli possono poco soffrir la fame . . . . . le Tartarughe terrestre le ho condotte fino in *diciotto mesi*, le Vipere fino in dieci; e . . . . . un Lucertolone africano campò più di otto mesi senza voler mai assaggiare veruna sorta di cibo . . . . . ."

Of more popularly known instances I will only re-

mind the reader of the "never-drinking" camel-lipped rabbit.

Eager as everyone is to see the sights of those desert wells which are as rare as water-fountains in vast intemperate London; one was, as a rule, no more attracted to stop very close and long than one would at a London cross-road, with several glaring public-houses grouped round each corner. Should you be inclined to call these wells the "eyes of the desert," remember the sore eyes of poor children in Nile towns.

Some of these wells are set at the feet of the rocky, craggy brims of table-lands, or high shores bounding the plains. But one sees them generally in the sandy, clayey centres of wide, often immense, kettles sunk in the deepest parts of the valleys and plains; as if scooped out by the mighty whirls of past seas and torrents, or as if they were the collapsed tops of former volcanoes. Whatever train of vegetation they may boast of along their hard and soft approaches, the immediate neighbourhood of these wells usually looks barren and desolate—at least within a circuit where many a goodly village could stand.

The wide dish is studded, more or less, with small craters. Some of these craters are the wide, upheaved brims of wells. Your eager look there meets a dark hole bored into the sandstone, or dug in the clay, and kept open by rough wooden frames, of a width often just enough to admit a man. The other smaller craters round such wells are scooped out so as to serve as troughs to water the camels, or to soften the hard black water-skins before they are re-filled. Other basins with their satellites are wells fallen in and forsaken.

One of these kettles, which is rather confined and stony (Sahfeh), bears strong evidence of having been

girt all round with low fortification walls—dry masonry of black stones. It would be interesting to get at the history of some of these wells. (Some specially prepared future traveller, able, and with leisure at command, might make it his task to study Arab historians in the deserts.) Battles, sieges, rapes, extortions, anxiety, mystery, ceremonies, feasts, robberies, murders, hunts, conflagrations, stampedes, and desolation of the weak or vanquished—all this, and more, in rapid succession, must have occurred. These vicissitudes would differ from man's doings and sufferings in other countries only by the rapidity—desert-inundation like—of the incidents, and the perfect contrast between plenteous variety and excited action on one day, and monotony and desertedness on the other.

Often when you arrive at these circular craters, you find all the borings filled in, or at least choked to some depth with clay and sand; or else they offer only contaminated water over a layer of infected mud. The latter has to be pumped away, the other cleared. Digging wells, then, is one of the usual tasks of a caravan. Furthermore, the larger the caravan, the more wells have to be opened, as people must count with time, and work may be shorter than waiting. Perhaps it is as well that the precious stuff should be kept carefully secured like some other treasures; and in some parts and at times they are purposely shut by respectable Bedawins to starve out roving marauders. It is asserted that, during war, such wells have been, by mean savages, deliberately poisoned. But imagine a misguided caravan arriving at such a place; the tired men would dig . . . . and then come to the impervious rock; and then they would consider whether they had not better stay in those shady dry graves altogether. . . . No:

the water *will* come, and then . . . our corpses will have infected it, to the detriment of those that are to follow. But take a less gloomy view. Imagine the only remaining well infected, and the Arab has no still, not even charcoal handy enough to disinfect in time!

Even under the best auspices, these wells are not paradisaic. True, there is in the caravan many a camel that, regardless of loads or even a resisting rider (whom it will whirl and weary into yielding), would run at full speed many miles, poetically drawn by the smell—not of the water perhaps, unless that is violently stinking—but of the environs which are always so—at least to a camel's, and likely, a Bedawin's nose. The ordinary movement and life at these places has in it, on the other hand, something pleasant for some people. If the colours of such a depression, ruffled by a number of borings, are not very blooming, the shapes at least remind one of flowers; each well-boring with its surrounding troughs looks like a narcissus, or any other flower with five or six flat petals and a long thin throat.

The work of preparing the wells and the troughs being done, there remains the extemporising of buckets (skins with a hoop perhaps); and may be the fitting of pumps, to save time. There is the work of checking and keeping in order the impetuous and sometimes insatiable animals. The water has to be examined: and the water often differs greatly from borings in the same crater. It might be well for the men not to be too reckless with the remainder from the previous well—as mixing the waters, or drinking them alternately, might often be more advisable than rushing in excitement for the new, dubious, and frequently disappointing beverage. If, among the senses, the eye only is a little

shocked, the salubrity of the water is taken on trust and tradition. But though fresh in a sense to newcomers, these waters are not usually refreshing, and are often not cooler than even the contents of a tolerably warm bottle on the saddle. The water from shallow wells keeps close to the yearly average shade-temperature of the place; and that temperature is high. In evaporating seasons the water skins even when kept exposed to the sun, are cooler than the liquid "fresh" from the wells. During cold winter mornings it would be agreeable to use the well water as a warming agent in "hot water pipes."

The washing and filling of metal barrels and skins comes after the camels are satisfied; for, although they *can* stand thirst, they are occasionally revelling drinkers, and then while the camels drink, there is neither well, bucket, pump, nor man to spare.

No, the halts at these locks in our dry canals cannot be called El Dorados, even in a well managed caravan; and there is little of that beatitude which is generally coupled with the notion of arriving hot, tired, and thirsty, at a watering-place to rest. The watering and storing, with unavoidable mendings, is not the only work additional to the usual camp duties; there is the grand and general washing of clothes, which in these climes may cause more labour than in colder ones. The reason is that the proper and most natural dress here, especially for walking in hot heavy sands, is composed of a thick, but light layer of many thin films, all kept clean.

The really enlivening thing about a desert well is the opportunity it affords for having bath-tubs generously filled, twice a day perhaps. Imagine some gloomy Anglo-Saxon jerking out in sudden glee the Hibernian

remark through his tent walls: "I say! Nine inches of *solid* water!" Well, if not very solid so far from the poles, this dark matter has some thickness, and more perhaps as it is warm. Then, it is in these cratery moons that one has the best opportunity of seeing, and coming in contact with, the migratory children of the country. These sights are interesting, inasmuch as they blend strange with familiar impressions. Familiar are their herds of cattle, flocks of sheep and goats, the donkeys, the horses, and the eggs, milk, and butter, and such like, which they may sometimes have to dispose of. Strange—*place aux dames*—are these chaste Arab women, with their *négligé* air, without a suspicion of coquetry. Familiar to us, coming from places in Europe where we are permitted to meet well-behaved men, are the quiet, easy, and pleasant manners of these good-looking dark men; but strange is their confidence in their vague-aimed fire-arms, ending in funnel-heads, like these well-craters, and often refusing fire, as these do water. Familiar are the pretty children—naked—but strange is their fright at our friendly approach with the hard shells of our helmets and our undivided hoofs.

Considering all this bustle, with the addition of impeding clumsiness at the starts from the wells, owing to the sudden increase and redistribution of loads, and owing to the falling off in discipline consequent on every prolonged stay at one place,—considering all this, and more, it is natural that the members of the camp do not enjoy their relative rest, until off and pitched clear of the wells, at a distance of at least one day's journey.

VEGETATION: ITS LIFE AND PHYSIOGNOMY.

I NEED not, I think, in this advancing age, waste time and try patience in confuting the exaggerated mediæval notions about the absolute barrenness of these deserts with phænomenal rains, or the fabulous exuberance of vegetation in their "oases," or rather in the deep, padded basins of their numerous watercourses. Nor do I think it seemly, as some recent travellers, very ostensibly "scientific," did (in some accounts which read like illiterate carpenters' bills), to call my friends, male or female, by the name of *laymen;* because, forsooth, I do not suppose them to be "well up" in botanical terminology—the sole part of botany I may happen to know *a little* about. Therefore I will *not* condescendingly dismiss their inquiries by so slip-shod a compromise as that for *them*—the lay plebs—it is even now as well to hold that there is "no" vegetation after all in deserts exactly similar to this one. The camels know better; because they manage to live exclusively upon fractions of this vegetation; the cases in which they *must* be fed on preserved fodder are as exceptional as people starving in the best parts of modern Europe. We never fed one camel in the desert, and not one died of hunger. The poorest parts I found to be those which are also otherwise most objectionable—in the close vicinity of the Nile. There are plants growing on the sides of volca-

noes, and plants—not germs—flourishing in the craters in the heat of boiling water; but the brinks are usually barest; so are the brinks of the Nile plateaux, where camel skeletons most abound. The fitful growth near the Nile is twofold—one part is cultivated property, the other is unfit for the food of the very accommodating camel. The rest is more barren than any other part of the deserts I have seen. The stalks of dhurra, resembling those of the millet tribe, were therefore daily purchased in the Nile villages for fodder.

But to appreciate the beauty of this desert vegetation we must discriminate a little.

Grasses.

The few rains about July, which imbed the seeds into the clay they have made or softened, soon make them grow in the nursing hot-house heat. Most of these poor seeds have been leading a nomad life in these wandering plains, sometimes bivouacking by some stone, or again being received in the arms of a dry tuft of grass more or less related to, or swathed in a Samaritan evergreen bush, the little dome of which seems to delight in the aspiring minarets of lofty haulms which it has fostered. The patriarchal dry tufts, then, appear after the first rain, when the seeds have taken root under them, as if the grass were perennial, and shot up from the old roots again. There is little hope for the solitary seed, even when settled after its wandering, in the clayey chinks between the shifting stones, unless in very exceptional weather, when the busy showers and inundations act towards them as reapers, sowers, ploughers, and irrigation, at the same time. Safer are those seeds whose fate is settled by

the first low winds which lead them to some vegetable shelter, made precious by the sponge-like action of the roots. There seems to be still more chance for those seeds of the taller grasses with a tremendous foundation of root, which are carefully imbedded the moment they are ripe—as if by an anxious parent—into those concentric furrows ploughed by the sharp spikes of the mother haulms, or by the thorns about the glumes of the spikelets—as they bow down from their unsafe height and whisk round in the wind on the softer ground. The depths of these furrows in the little threshing-floor secure the seed; and the arcs, by reason of their continuity, are channels for collecting and retaining the water. Well, these are instances of a hard struggle for existence.

While green during a short holiday, the flat blades are not more bent than those of Italian grasses. But the burning rays soon make them shrivel and curl, like hair under the hot curling-tongs of the hairdresser. The pale bouquets indeed appear in the heated air like the ashes of burnt grass blades, consistent and curved, or, as if they were homochromal excrescences—squirted up like fountains and then stereotyped—petrified in the shape of miniature bleached weeping willows.

Now about distribution. We can easily follow the thicker and wider sediments of clayey sand, guided by the clusters of *tall* coarse grasses—one of which is the Halfah or Al-Fah. The thin stalks of grasses—with their bushy spikes and frilled rings, three or four feet high—usually act as the boundaries of property. This powerful grass acts like a sheltering forest for a whole undergrowth of the low, thin, spicy sweet grass which the camel likes best. The small grass, when solitary and unsheltered, grows in curled tufts with very

compact heads; when among the Halfa it multiplies into a tissue, and relaxes into smoother, looser, and lower forms. Thus prairies, of a few miles in extent, cover entirely those accumulations of soil which are, as tested by walking and wind, practically nothing but deep sand. These yellowish crops are very pleasing in their wind-rolled undulations. The prairies—they are, as a rule, sharply defined—are interrupted now and then by beds of native rock or conglomerate, or banks of immigrant shingle. These shingle banks, when small, are usually veiled by a flat texture of delicate hay. Seguin informs us in his recent book on Algiers, and Sir Joseph Hooker in his latest work on Morocco, that this tall grass has been exported for some time in hundreds of tons every year to England for paper manufacture. This, then, is a kind of resurrection of the Egyptian papyrus. Only it seems more like that nightly resurrection which, according to "Nature" of '79, takes place with shepherds and beasts at 2 o'clock and lasts a short time; short, indeed, as the "Journal of the Society of Arts" has just signalled the evident extermination of this Algerian grass by the paper-eating English locust. So dense do the rugs of delicate hay grow under the tall grass that a burning match thrown by inadvertence on the ground in windy weather soon expands into alarming wings of conflagration. The fire usually vanishes in a short time, in the train of the wind, stopped by the more barren rocks. In faster-sweeping winds, the low "blooming tulip bed," as a Persian classic calls these fires, hardly singes the more thickly armoured high Al-Fah in its hurry. The smoke appears as long and subdued as if it were a very thin but high sand-spout, laid flat, and screwing itself ahead.

Mushrooms.

The only place where I found a small and loose group of this curiosity, in a condition of dark, silicious, and chalky ashes, standing erect on very high stalks, I thought a very unlikely situation for such a fungus. They had been standing for many months after the last rain. Their position, on a somewhat sandy and clayey elevated rock, was not much more sheltered than the depression of the palm of the hand;—and there was no other growth around but a few widely scattered grasses.

The Solitary Mimosa.

The outlines of this ruling form in low, hot, and dry tropical regions, are similar to those of the Italian *Pinus pinea*, and have a singular analogy to the ruling types of the damp and cold Alps, such as rhododendra, alpine firs, and alpine herbs, which branch from the ground in umbels, corymbs, and the like, with scarcely any stem. Moreover, this tree, participating in the highest perfection of vegetable development, has the outlines which the lowest vegetable organisms assume: I mean those parasitic mushrooms which are still popularly known as the "fruit cups" of the stiff algæ, miscalled "lichens." And the analogy of grouping does not end with the outlines of the conical cups: for the tender and most active parts of both tree and mushroom are displayed and kept together, spread on the flat top.

Just as the whole extent of our arena is studded with these hills or heaps, so it is also sprinkled over, even in the poorest parts of the lower places, where the most frugal and packed of the low grass tufts stand, with

these desert acacias. They are, in the widest and poorest parts, far distant from each other; yet we rarely accomplish a day's way without being greeted by them.

If I fail in my poor endeavour to convey a general notion of this part of the Sahâra, I will at least try to fix those odd features which were striking to myself; especially as I have always keenly felt the wrong done to these trees by rough travellers, whose cloven pens kicked them about like shapeless rubbish; or, as prudent critics would the leafy gills of their mushroom scrap-books. Now, so far from being shapeless, exceptionally adventitious, and despicable, they are as essentially characteristic and constant a trait in the features of even the most barren and rocky parts of the desert, as the rocks, sands, and the herbarium of grasses. Besides, being constant, they are beautifully suitable to the landscape. They are distributed like the hillocks, and everywhere appear as pendants to them; for they look like inverted hills standing on their peaks, and the whole arrangement reminds one of certain architectural ornaments.

These skeleton funnel heads act up to their appearance. Their tops are as sharp cut as if moulded by appointed gardeners into circular disks, flat and level. It is easy to see how the maximum of the liquid God-send is caught, and conveyed to the eager sponges of the roots which, you may be sure, retain it like the fifth spongy stomach of the camel, to keep the sleeping leafless tree alive for another ten or twenty months, when rain is again expected. I believe, the cut of the porphyry branches, tiny, but firm and rigid, and very closely packed; the arrangement of the thorns, and the shape of the leaflets, and even the blossoms, are calculated eminently to secure the greatest amount of water even

from a fleeting sprinkle. The leaves are cut into tiny spoons, and are capable of a nervous action. The flowers are globular tassels, perched on little stalks. The branches are full of pointed cocoons, like grocers' coffins, or like pencil-point caps. These cocoons open in due season; and the greater part of the tree is often found to be covered with a stout gossamer web. The whole is the perfection of a filter. The smallest drops are absorbed at once. The larger drops are caught, split up, and distributed by the thorns and the other organs: they cannot rush through with a mere toll of a paltry kiss, and then fall away.

Having got all the moisture they can, they nourish a quantity of bloom and foliage proportionate to that moisture; and ripen quickly, shed their leaves, and work up and seal their juices in treasure bags of gum, inside, and perhaps outside the savoury glassy rind.

When uprooted by storms, they travel freely, and are caught in successive corners of the desert, with their discs upright. In this position they look like flat-topped bouquets left by ladies on the seats at an entertainment. The discs thus detached from the ground continue partially to flourish on apparently for years. This shows how little the tree after its full development is dependent on its parent soil.

Desert Box.

It is not a species of Buxus; but its evergreen leaves, in shape, size, and even in thickness and colour, resemble the box very closely; only their gloss is broken, and they are somewhat hairy. Nor can I remember the appearance of any other plant which resembles more com-

pletely this closely-packed vegetable wonder—branches are not seen—better than the dwarf box: else I should have likened it to a foreign steppe-plant—the cactus, called melon-thistle. It very often made me think of a sea-urchin, to which its outline conforms still closer than any of the others. The size of the bushes varies only between that of a full grown desert-tortoise and that of the largest sea-turtle. This evergreen is strongly resinous. Each bush I found usually adorned with a few scattered flowers, apparently tenacious of life and in attachment. Each flower consists of one riband of a petal, and a five-threaded tassel of the inner organs hidden under it. The bush, thus finished, appeared as if three or four flowerets had been plucked out from a dandelion head, and stuck into its coat-of-mail. More strictly speaking, the single, anguiculate petal is like a narrow hoe, stuck in the calyx by its handle, and acts as an umbrella over the anthers and pistil.

This verdant knob remains associated in my memory with the stonier parts of the poorer, aye, the poorest valleys, where it seemed to have called around it some grasses and to have kept them slowly augmenting. It grows on and among the smallest of sand-bathed stone mounds, consisting of pieces varying from the size of a helmet down to that of a baby's fist—like material for a macadamized road.

The bushes occur in small groups like the ghazel, with a wide berth for each bush. Only these groups are often not solitary, but would appear now and then as a very loose string. They cease when the character of the landscape changes from the little heaps of small stones just spoken of. The heaps seem volcanic; and, though broken, are grouped like viscous, lava coils: not

unlike the resinous plant they rear. These little, but strongly marked bushes are a never failing delight to the camel, ready and permitted to browse *en passant;* and they are very dear—I need hardly say—to the wanderer's eye.

Euphorbium Bowers.

On accumulations of clayey sand which are somewhat rock-sheltered, and especially when in the course of channels of any useful length and slope, this remarkable evergreen wicker-work rears its inverted full baskets. These dome-like bushes, the size of large tents, gather sometimes in loose colonies. Stem and leaves there are none to speak of: it is all a green tangle of smooth thin rope, stretched out like the branches of a weeping willow.

I have been, at times, strongly drawn to compare the usually pale spiked desert grasses to seaweed, just as I compared the desert-box to a marine hedge-hog. The solitary desert acacia is also comparable to a normal sponge standing in the sea, and in its stagnant condition, during droughts, to a stiff bunch of radiating coral hung with pods, the imitations of elongated stone-cleaving mussels, and hung with cocoons or coffins, the counterfeits of tapering sea-snails ("eulima" especially). In the same way, this euphorbium, sporting a green thorn here and there, suggests very impressively a polypus with a thousand whipping, angling arms. The full-sapped, easily bending, lissom, thin arms seem to do amazing work. This sand mound of the height of a haystack, on which the fresh bower reposes, has been raised by the plant itself. As the sediment which it detains from the passing winds grows higher, the plant

takes fresh starts, aided also by the animal agents it invites.

I have seen few, if any, of these huge pellets of silk cord, without some flowers and berries: both of which are of delicate crimson. The bud of the seed, true to its euphorbium characteristics, well-fed, and high-carried, has the distinction among the tribe of wearing a helmet with a bold perky crest. To define it more closely, the petal is a fairy soup-spoon grasped by the cup and serving as a parasol, like the petal of the plant I call the desert-box. The ripe berry, on its pushing stalk, is a counterfeit of the half ripe wild cherry. The whole is a hemisphere of a little world full of life, and worthy a separate study. Watchful ghazels bivouac there; small, timid quadrupeds hide and hoard; birds also flutter, to have a peck, and chirp their grace, posing perhaps, with elevated head and tail, in high glee on the top of the dome, as a crescent; the rubbish-clearing ants run to and fro as if the maintenance of the divine fabric depended on them alone; and the grateful butterflies are busy about their gardening.

This bush usually appears as a promise of more substantial vegetation. For in most such parts of the deserts where they appear, they seem to lord it over all, like the frequent domes in a more affluent Oriental mud-village. In valleys with hoarded water, sometimes well inundated, our noble friends become drowned, metaphorically. Actually, they grow larger in such places; but do not raise pedestals for themselves; though they always form a very marked and important trait in the small and clean-swept forest (on hard ground washed smooth, without herbs or grasses, and almost without small shrubs), the trees of which press close on and domineer over them.

Vegetable Goblin.

This seems a spasmodic, hysteric effort at tree growth. It is a pale tree, full of gnarls which look like lava loaves wound like turbans. The wonderfully tortuous stem and branches suggest their growth being the result of a broken series of unequal struggles, wringings, and wrigglings. After each effort of tying and clenching successive knots the power of growth seems half spent, as the thickness in the new direction is only a fraction of what it is before the knot. The quickly thinning branches, two or three in number, over the thick stem, are as if the viscous juices had been utterly wearied out and spent in despair, and finished in fitful twiglets, suddenly fixed rigid and straight, resembling thorns, but without regular points. These twiglets of an inch or more in length, remind me of the flowing stalactites of some unequally viscous matter, as seen, for instance, when a thread of condensed milk, after having trickled from some height, snaps from below, and begins to draw itself up. All parts are pale and destitute of gloss. Coming very close, the tree appears capriciously sprinkled over with scales of a nearly yellowish grey, half bilious, half mouldy. These scales are stuck into the bark like flattened pear seed, or hang on like tears. These uniform and homochromous scales are the leaves and petals. The latter are arranged cross-wise, and look cross. You might mistake the leaves, and even the flowers, for mere chips of the bark, which seems to keep the wood strangled in its embrace. Even the short anthers and pistils look as if clenched into fists of tiny gnomes half stuck into honey, and out of temper from exhaustion.

In places where the rare rush of vehement waters passes away with the clouds, these resinous trees look

most grotesque; but in more hospitable plains and valleys, where the high grass with low mimosa bushes grow at an equal level, the goblin trees become more numerous, and their branches more stretched and unbending. Notwithstanding this, they do not look very much less weird-like. They seem well in keeping with the more clayey depressions which gape with a knotted and tortuous network of chasms wide enough to wrench or break the leg of man and beast, should these latter not walk with precaution. This apparently sulky and nervous method of progression is necessary in order that the men may have nothing more to regret than the appearance of coiled gnarls called "corns," on new and remarkable places of their feet.

Candle Tree.

In one of the dry gulfs, cut by the terribly incisive rain, I found two leafless dark trees of the type of a weeping ash, on which hung dark fleshy pods of the shape and size of long thin candles. There was much grass in the sandy channels of the abrupt depression in which this tree was found, but no other tree or shrub was visible for miles.

Herbs.

The two green wings of the senna—pinnate like those of the locust tree—were very conspicuous in the open desert. The fragrant camomile appeared charily. So did the orange-sized Sahâra melon "of warning smell," but of good repute (as a cloth preserver, I believe) with its exquisitely cut leaves.

Thorny Tracts.

Pollard bushes, and irregular loose shrubs, small trees, with tiny branches, hardly exceeding a horse's height —all chary of leaves—are sometimes sprinkled over the prairie or savannahs of Al-Fah grass. Then the bushes —more thickly set, but with little shade—would supersede much of the grass, and, instead thereof, would invite and shelter other plants. Flowers, however, were rare phenomena even in these thorny patches during the seasons when rain rarely falls. The ground on which these "thorns" grow is variable—sandy clay, clayey sand, pebbly clay, and native broken rock. An Alpine-looking Scrofularia, very low, but protected against soft, fatalistic wooers, such as slugs and snails, by its mighty thorns, was often seen reserving its generous azure cup with its golden nectar for the mailed entomological knights riding on fast wings and glorying in those deep scars, from which their name of insect is derived. This little plant was usually found sheltered on one side by bushes or trees. But at one place, under a loose row of mimosæ, I thought it very strange to find a carillon of the fine blue bells of the Campanula, and these, too, raised on tender thread-like stalks to the level of my pockets. The stalks thus had the appearance of bell-ropes hanging down to the ground.

Another contrast to the short, stiff, bushy stems was an unexpected green soft stem, as high as a ghazel's back, as thin as a woodruff stalk, and as upright as a palm tree. It was very glutinous all over, bore very small and few leaflets, and had a few minute pale flowers.

But these grow only in real thickets of the thorny region.

Small stout vetches, with pugnacious thorns, and flesh-coloured little blossoms, being a resemblance to camels' feet, would sometimes appear in the clearer parts of the thorny tracts.

Very often there are a few acres of a kind of vegetation which is a medley between dry prairie and thorn-bush stripped of leaves. The thorn bushes, sometimes developed into trees, are of irregular outline. The hay-colour of the sandy prairie and the dark nut-colour of the ligneous thorns are combined where the ground is relieved by the upheaval of semi-globular tumuli, bristling with light and dark stubble in light clay. These hemispheres of a man's height or less, which give additional variety to the desert, are the combined work of beast and plant, and they are constantly being formed. Some of them are cupolas with umbrella-ribs of grass-roots over the subterraneous burrows of large quadrupeds, the entrance being masked when feasible with high Al-Fah grass. [*Query.* Would the fox, ghazel, hyæna, or jackal *plant* Alfah for a sentinel?] Others of these heaps are formed from the decay of three elements. First, a termite tower is built on to the stem of a thorn, or, rarely, a goblin tree; next, the stem becomes bored, both outside and inside, into a filter, as the tower itself is bored inside; and thirdly, a pushed or rolled boulder in some flood breaks both of them into a heap, in which the boulder sometimes remains for a kernel. The thorny tracts are further diversified by several combinations of termite towers cemented to perforated trees with partial foliage. Gum-trees are tough and die piece-meal unless for a long time under water. The combination just spoken of

looks like a windmill in ruins.——The scenery is completed by the scattered termite minarets, and a few small domes of box.*

Between such tracts as those just described sometimes deeper places of a few acres would appear, with a hard soil caused by a combination of native rocks and stones, cemented and plastered over by a mixture of large-grained sand, limestone powder, and stiff clay. These tracts are in the fastest sweeps of floods, and look very smooth and clean-swept, except from slight sprinklings of new-blown sand. But even these semi-lunar bare patches are relieved—if by nothing else—by the stumps of destroyed termite light-houses, which appear like flat stretched humps of camels.

I often noticed a common phenomenon, the silvery skeleton of a dry herb, running along, spider like, gambolling from one coppice to the next. The branches of this dry herb are huddled up into a globular basket, which embraces with its curled-up stalks the clustered capsules or dry berries, which look like cocoons of polished gold the size of grapes.

The distribution of the thorny tracts, and, indeed, of the grassy tracts also, differs from the vegetation in districts rich in humus and better humoured, is in this, that the growth is rarely concurrent with the valleys and tributary channels. These veins and arteries pulsate as irregularly with growth, as they do with water; and I offer the coat of my goblin-tree, with its spasmodic irregularities of growth, foliage, and bloom, as a representative of the desert with its vegetation. At the same time I should not like to be misinterpreted as

* These have been miscalled with awkward persistence "white-ant-hills," though they are neither hills, nor raised by tight-laced ants.

being ill-mannered enough to tread with the one leg on which my lame comparison stands on the toe of my classic model, who likens this vegetation to a desert panther's skin.

Desert Harbours.

The pilastered plateaux, with their crowning piles, by which the extent of the lower fields is embattled, are by no means quite barren. They would nourish, even in the regions of scanty rain, green bushes and trees, besides the solitary mops of inconspicuous hay. These bushes are not however visible from the usual routes in the plains, as they are hidden in the frequent sudden depressions of these plateaux for the use of the ghazels. The plains and valleys, of which the network of the lower field consists, whether broad or narrow, bulge out frequently enough into sudden gnarls of full-sapped, compact little woods. These little forests are most frequently close to the steepest sides of the low plateaux, as if sheltered in a succession of semi-lunar-shaped havens. Besides clayey sand, the most flourishing of these deep reservoirs of heaped-up powdery soil are evidently rich in limestone particles. The vegetation shows it well. The ruling features of the well-fed foliage on these gregarious trees I remember to be chiefly these:—

Wide branching trees with very low stems, hidden in a profusion of lancet leaves, like those of olives or oleanders, very thick, very juicy, without gloss apparently, powdered over, and as much grey as green. Berries the size of cherries, of the same sea-green as the leaves, and the same exterior roughness, though gushing with juice. The roughness of the leaves

and cherries is that of plain mortar walls and balls of sand-soap, or that of the surface of the unwashed cemented termite pillars. The outlines of the trees are those of haystacks, or bower-shaped; in this respect resembling the outlines of the desert-box.

Another type of tree in these havens is one with a stem hidden like the preceding, and with similar outlines curving to the ground,—only the whole tree looks more like a stuffed globe tangential to the ground. Its thick leaves, still more closely set than the above-mentioned, have one side yellowish green, with the touch of cast plaster; the other surface dark or bright chlorophyll (of the colour of senna or clover), with the gloss and touch of a marble statue. The shape of the remarkable leaves is as nearly discoid as anything in nature; their average size is that of a penny, they keep as rigid and flat as a coin, and their thickness is that of a sixpence, or a little more. The leaf-stalk has the same proportion to the diameter of the circular blade, as that of a circular Chinese fan to its handle, and they all seem as alive, ready, and happy as the foolish fan of a flirt. That remarkable hill, which I mentioned in the essay on the soil, coated with or consisting of cement balls of the diameter of these leaves, I found close to a group of these coin-leaved, globular trees.

In the chain of contrasts within these havens of vegetation,—contrasts between very rigid and very pliant growth,—a delicate beech type is remarkable, with white bark, slender and very tall, tapering stem. Its loose thin branches are gracefully bent, with small pendent leaves, like flat serrated jam-spoons, or like little kites hung up, and merrily waving in the slightest breeze, showing alternately their pale and green faces.

I noticed three types of thorn trees in these desert havens. From what I remember, they are all of the opulent Mimosa group, though one looked like a Gleditschia. As one type I will mention the irregular bush-and-tree form; the latter reminding one of the Nile Mimosa. The other type reminds us of our old friend the Solitary Acacia, with one thick top-stratum of foliage, from which strings of looser foliage and bloom hang, like threads of roots from swimming plants. The difference between the outlines of these and of the solitary type is, that in these there is some stem—sometimes pretty high—before the umbrella-ribs of the branches spread apart. The branches, however, as soon as spread asunder are of the same pollard arrangement as in the solitary type from the ground. The third Mimosa type would be pronounced by most people as the finest of all, adorned, as it is, with exquisite lace-work of palm-leaves and palm-blossoms in miniature. Very tall; so tall, indeed, that camels have to stretch as high as the giraffe to browse. Some of the higher and richer branches are only reached by the active camel-men who fetch them down with hatchets, by climbing their slender stems. The outline of the foliage,—which though not very thick is equally distributed,—is that of a balloon. The branches, thus spun out, are almost straight, very little bent near the tips, and as springy as steel foils. The nearest approach to the solitary Mimosa type, in these clouds of foliage (under which there are in the dry seasons no green or flowering herbs), is one with its outlines simply expanded to the largest dimensions of an old oak, and on which the permanent foliage, blossoms, and pods are regularly distributed almost down to the ground.

As before mentioned, the Euphorbium bowers also

form part of these bright thickets. And the little desert-box is sometimes found on the skirts, or in the chinks of this vegetable assembly, in places where there is more sunshine.

These havens of living masts,—close, narrow, meandering strings of which extend in certain directions to a day's journey,—are sprinkled moderately with dry knobs of grass; for there are no prairies hereabouts. There are wider expanses of the inundated ground, situated among closer thickets of taller trees, which look like stamped and cemented floors, rich in pale dry clay. They are swept clean by the last flood, without under-growth or chasms, and kept smooth in the airy shades.

Contiguous to these smoother thickets, rough tracts with abrupt inclinations occasionally appear in the clay, with-stones and chasms. The deeper part is a scorched channel with dry tangles of aquatic plants round the decimated and sun-blasted trees, and amidst a slip of dry prairie of rather stiff rushes. A few hundred or a thousand yards further the angular channel would perhaps vanish under a flat sandy expanse, thick with a harvest of prickly, but less rigid prairie, coming in its turn abruptly to a close on a lower rocky plain. This is our stony desert at large, with its unequal veins of sediment, and such accidental vegetation as already described.

Vegetation between Two Zones.

Advancing south-west, and constantly, though imperceptibly, mounting, as we advance, the patches of vegetation—chiefly thorny—thicken and multiply

fast. The greater part of the plains and valleys becomes one thicket; and the grass, shrubs, and small thorn-trees clothe even the hills more or less with ragged and partial foliage.* Though the rains, more frequent in these quarters, raise here more clay and wood than there is in the thorny tracts of the northern stony deserts, yet bloom and foliage was in July still as sporadic as the vegetation farther north. The sudden appearance of close carpets of verdant blooming herbs, after each rain, mentioned by some travellers as the features of those parts of the Sahâra which boast of more sand, I have here not noticed. That season of "rainy spring" in July, looked even at Um-Bahdr, frost-bitten, or rather drought-stricken, and certainly beggarly, when compared to what I have called "harbours" even in the most glaring desert. In the havens of *this* region, however, the juicier vegetation on fatter soil went up like fireworks, or was seen coiling and winding into tangles like dense smoke. The bunches of grass pushed a few new blades and stalks, just as sudden jets of intense sparks would shoot up through paler flames. In place of Euphorbium bowers and clumps of box there appeared the "virgin bowers" (Clematis) with orange blossoms like bridal wreaths. And what the ring-like engaging tendrils are to the leafy bowers, a lithe, rope-like, endless cactus is for the trees.

A most marked feature, however, is imparted to the vegetable physiognomy of this intermediate region by the occasional appearance of the Adansonia (Boabab, or Monkey-bread tree). Nurtured in the seclusion of the closest and most inviolable thickets, knit together by

* "They [the waters] drop upon the pastures of the wilderness: and the little hills rejoice on every side."—PSALM lxv.

maternal bowers combined with cactus ropes and an irritable Mimosa with three or four different sets of jealous thorns,—nurtured in such association, the young giant makes its first growth. It is not seen in these regions till generations and generations of its nurses have nurtured and dressed it with their own bodies, and have then begun to die off, when soil and tree are sufficiently raised. Then, as the scaffolding begins to totter, outward agents are attracted to continue the demolishing process: creeping, running, climbing and flying animals.—At last, the monument emerges from its case, a ready prepared colossus. It emerges a colossus; but not alone: the last seeds of the leafy nurses and teachers are not finally dismissed until their progenitors have secured and brought up a court of noble trees all round as fit companions and trusty defenders for the central monarch. Hundreds, aye, thousands of years old, the stem—having the colour and smoothness of an elephant's hide—shoots up, almost widening towards the top, to towering heights. These marvellous upright stems swell out in three or four places in a manly, sinewy fashion: to which the shin-bone of a giraffe bears the closest likeness. Some have a few apparently slender branches, as seen from below, and the foliage starting from the height of a church spire would then extend in the fashion of a Scotch fir. Others begin to shoot out branches of the dimensions of centenarian trees, from a height which could be reached with a stick from a Soudan camel's back; and on these the flourishing thicket of foliage and blossoms forms a mighty dome.

The leaves and flowers of this malvaceous Adansonia are typical for those of a great part of its court, high and low, and of the whole region. Its five-lobed

or digitate leaves, the tips of which could all be embraced by a circle, seem to be imitated by the leaves of cotton found here, by a herbaceous climber of the cucurbitaceous type, and by the three-lobed and five-lobed leaves of several bushes. Its white flowers, the size and shape of a tea-cup and saucer, with a pile of crystallized sugar in the former, seems to dictate to the blossoms of the climbers, bushes, and trees, whatever shape their leaves may have: the ruling forms being star-shaped petals, with very compact tassels of anthers, free down to the calyx or grown together to a greater or less extent.

Our worthy friend, Colonel Mason Bey, gives a very valuable account of these Adansonias, in his recent description of an expedition to Sennahr: one of the facts about the antique trees being that the natives prepare, clean, and cement the inside of the hollow stems very carefully every year, to make them serve for water-tanks. The ascertained volume of the water thus stored is enormous. The larger crowned of these Gangaloos—as the natives call these trees—are whole farms or preserves. The number and variety of animal species which find food, drink, and lodging in it, are very striking.

Amidst the increasing variety of vegetable species I was not able, during my short stay in this region, to catch more of the characteristic traits of the flora. Trees, shrubs, and herbs were generally in bloom at the end of June and beginning of July; the blossoms ranging mostly between greenish white and orange, as in the desert. The herbs—situated not much outside the court of the Gangaloos—if they also were not climbing, were almost sure to be creeping from one bush to the other. An odorous trailing vetch was very

frequent. Its delightful azure blossoms were over an inch long, and looked as if each were the creeping flame of a level wick. Even this plant has five leaves—Robinia type—so arranged as to be embraced by a circle.

The tree, whose appearance in Dar-Foor I thought most remarkable after the Elephantine Adansonia, was what I will call the ostrich tree, the structure of its soft, thick, resinous-looking leaves being obviously like ostrich feathers. And beyond Um-Bahdr "giraffe-trees" were seen: their towering thin stems, holding aloft their little leaves in a compact bunch formed like a taper flame.

Let a line or two suffice to notice the interesting phenomena of two or three half-acre patches of stubble left from cereals near the desert hamlets.

Nile Borders.

The gorgeous promises of equatorial flora—specially that of trees—I met round Khartoom, are out of my province. So are the cultivated plants on the Nubian Nile. But I will mention that the enchanting wafts of fragrant moist air I experienced on arriving at the river, after a long desert campaign, have left a memory behind such as that of no other perfume. It happened during a hot sunny part of the day, and the blessed air came from an exposed field of what is there called beans. It is an alpine-looking pulse; with short, straight, and thick stem; and with all parts—quinquefoils, flowers, and pods—covered by a light grey fur. We had our camp close to that field for several days. And the perfume which embraced me every morning as I emerged from a

pestilential tent, which our stupidity made me at that time share with another sufferer, would have gratified an invalid. Place of relief! When I felt oppressed, I went into the open, fetched a deep breath, and was thereby rendered happy; nevertheless I was careful to take quinine against the sudden damp. The soothing effect of this air was comparable to that from the rare music of the convent bells in Khartoom—which were, of course, not so distressingly monotonous (*one* repeated note for full thirty minutes before each church time) as in certain parts of England, and in no other spot of the terrestrial globe I know of, except for alarm signals.

Nearly as bad as the air overnight in these European nineteenth-century tents, which sicken our best armies, was the vile smell in which I found one evening our camp mispitched after eleven hours' ride. It was a confined gorge on the rocky Nile route, and was, I believe, the only place by which the river was approachable during that day's journey. The stench, pole-cat like, as it was pronounced—or like that encountered when skinning a mouse, I thought—came from grey herbs as hairy as mice. The plant, like the previously mentioned one, was alpine-looking—an Asperifolia, I think. (I am not aware that the relations between vegetable hirsuteness and smells were ever investigated.) After having touched upon the impressions of the Nile vegetation from the smell, and somewhere else from the taste, I cannot omit mentioning my pleasure at the most refreshing of sights in the Nile deserts, or desert brims, during the four or five weeks of our caravan journey through them. The sources of this were the tracts covered with the gorgeous Asclepia. I particularize this plant so much the more as this tobacco-

leaved and balloon-bearing club has been abused in its very blossom by assumed authority likely to awaken echoes. I call it a club, because I should hesitate to style it either a tree or a shrub. The white, chinky stem grows like a termite tower—in size, shape, colour, and surface. Its branches are short weak shoots, a little gnarled. Its large simple leaves have the flesh and gloss of those of water-lilies. Its fruits are bright green balloons, without gloss, of sizes between infant fists and heads, and the larger ones appear very numerous. The seeds, minute and few, are kept in the centre of the stiff, thin bladder, supported by the stiff, thin threads of a vegetable cobweb. This milk-plant, whose juice, capable of covering a man's skin with bladders like its fruit, is used as medicine and cosmetic; and that abused flower closely resembles a glorious passion-flower—a carafe on a salver—though it is only the size of a farthing. The range of colour in its petal is the same as in the light and transparent varieties of the finest amethysts—the reflection on whose mythical virtue ought to have sobered the savant's serene judgment: but some people's vapours may possibly be dense enough to blacken even the crystal.

ANIMATION.

We passed through much space, where not a bird was to be seen on a carcase or in the sky, and not a tortoise-shell was visible, where not a scorpion was found in forty camps, and where hardly a fly made itself objectionable. But when animals did appear—in parts having increased signs of vegetable life—they appeared intensely alive. The scantiness and the fleeting nature of the vegetable growth can only afford support to the swiftest and toughest animals, such as ostriches, desert-antelopes, and restless animals of lower orders. Exceptions are compensated, as the slow desert tortoise, by being as abstemious as a hermit. But this animal is a fortress walking on spiked cannons. And as if there were such a thing as the law of Sundays among the very wild beasts, the beautiful ghazels would arrive at patches of sheltered plenty once in every few days. Yet their rest is uncertain, and they are constantly reminded not to become drowsy even in temporary prosperity. For, as the small families can afford on those days to congregate, and rejoice in sympathetic numbers, they take, let me imagine, counsel of the wise in their midst; and while each batch look forward to the direction of their next pursuit, they all have need to watch against the advent of the tracking evil, in the shape of lion, leopard, hyena, and jackal, whom

their ominous retinue of vultures luckily announce. You can see the *enormous* number and length of the quickly made tracks from a *few* antelopes; tracks which are themselves fleeting as they vanish in the sands. Between certain limits the numerous files of these tracks seem to complement the scanty distribution of vegetable growth.

What we may call sandy table-lands of small height are sometimes seen, with larger depressions, in which the low thorny acacias are sheltered and *kept green* with the moisture treasured in the sand. Unlike what we see in moist countries, here the tops of the hillocks (sand heaps of a dozen or score yards high) are conspicuous with the most showy specimens of vegetation—the Euphorbium bowers and higher Mimosæ. The hillocks which rear at intervals this vegetable coral, are often ranged like coral reefs round the copse, of a ring-shaped outline. The crested hillocks look like towered walls of a fortress girding a market-place full of life. In the seclusion the ground appears as much stamped by the pretty feet as a regular camping-ground is by feet of another kind, and is checkered by cast-off horns,—hook, screw, or sabre-like,—as if they were the remains of carnivorous people's meals. The watch towers themselves are occupied day and night by small companies of alternate sentries of the antelope tribe as long as they can camp in the neighbourhood.

As the copse subsides into the poorer and freer fields, you see these deer tracks, cunningly crossed and viciously recrossed, seldom simply followed, by the frequent dog-like vacillating piste of jackals, and quite as frequently, if not more so, crossed by the stretched-out polygons formed by the single-file prints of the solitary hyenas. The abounding straight tracks of these five-pointed

hyena-feet look like the leaves of the cotton plant on the Nile, but they resemble more closely the moulds of sanguinary halberds, barbed spear-heads or daggers, because the points of the trailing middle claws are very elongated.

During one day's journey—nay, in an hour's slow ride—you see the contrast, as perhaps in no other place but in deserts, between emptiness and torpor on the one hand, and the most springy intensity of life on the other—connected by vanishing tracks. Nowhere else does nature seem so forcibly impulsive in her aspiring metamorphoses from brute matter into ANIMATED machinery.

The fitful tumble of tremendous deluges periodically tears and drives along the gaping brute rocks, and groups and drills the stupid fragments from meaningless heaps into designed channels. You may see how the different material is ordered about and called together: the humblest is promoted to the first rank—that which was hiding in most thorough attrition, becomes appointed to bring forth and hold in its embrace the higher life of vegetable tissues. By a tertiary process of higher refinement through attrition, matter becomes sublimated into tissues fit to embrace animation.

Animation! . . . See how in its higher forms the next sublimation—animal intelligence—becomes patent to our blunt senses! Animation and obedience within the elastic limits, not visible nor yet quite calculable, of individual will! If savans find it hard to define the scent of flowers under their very noses, what can be hoped from school-boy definitions about emanations of such higher orders as cannot be solved *per saltum?* . . . Inherent aspirations of the soul themselves sublimate through ages, and nations, and families, till

they, in their due seasons, emit the phenomena of disinfecting and gladdening odour-puffs [let me call them] distilled from the hearts and brains of prophetic poets, who have grown exalted during a life of crushing sufferings, which would have dwarfed, gnarled, blighted, putrefied, and rendered contagion-spreading, more stubborn because coarser souls.

The masters of architecture account for the superiority in the style of a cathedral to the style of these rock temples, by saying that the beauty of the cathedral excels by reflecting that beauty which inheres in it by the manner in which it was reared. The great mass of the rougher work is negative excavation done by indiscriminate compulsion. The appearance is only relieved by what liberty the artists had to voluntarily and individually devote themselves by sacrificing leisure and perhaps favour, and what not. The beauty of a cathedral reflects the masterly organization, by a devoted artist, of all the bits of material which are the free-will offerings of self-humbled souls. But a further metamorphosis has begun passing through a still more refining process; and the result will be that the style, now aspiring, will change into one sublime. The aspiring style was produced by each acting individual, among limited sets of people, trying to learn the art of loving his nearest neighbours, and dividing himself between a few of them. The sublime style will grow to maturity by an accelerated accumulation of greater numbers of individuals becoming contrite by learning how to know, love, suffer for, and actually help the increasing number of individuals of all the nations, races, castes, and sects of this earth. And the end of all this toilsome work will be the higher organization of these most refined of earthly materials into a crown: a crown welded together by the

indefatigable interlabouring of all healthy hearts and all sane brains,—working together, and then expanding to dimensions of every colour capable of holding in one embrace the equator of this earth. The law and its tendency is evident enough even now: the plan is marked out, sporadic foundation jewels are apparent; yet what interminable processes of attrition, evolution and confrication, and painful and agonizing metamorphoses of countless individuals will have to be undergone to make the wreath fit even roughly at first!

Much has already been done preparatory to the fulfilment of the appointed task; yet how mockingly little in the face of the grandeur of that tremendous task! How much coarse-grained material remains! And what blocks—still defying lightnings and cataclysms! What formations still remain misplaced thousands of miles from their destinations! What barbarous distinctions still exist between the different classes of society, and what painful characteristics yet so sharply distinguish both! The one class, whose very essence is imitation, and whose time might more wisely be divided between wholesome work and the cultivation of their human duties, divides its time between feverish activity and wild interference with, and insults to, those whom nature hath placed above them for their good. The other class, who by their position seem obliged to busy themselves thoughtfully in wider circles so as to spread refinement, grace, and examples of active goodwill, misspends its time by indulging in the worst vices which spring from indolence.

Men all are appointed agents. Work, binding work, is appointed for every one. Just as the most cultivated of professional men,—savans, scholars, judges, councillors, prelates, and rulers,—are now more bound to

authorities, laws, and interrelations than slaves ever were to masters; so the enfranchised affluent of this chosen nation should make it their cardinal duty to become refined by the reverential study of their indefatigably SUPERIORS' will. But if that easy class be still as coarse as that painter's outlaw apprentice in *Punch* who asked, "Who, where, what are they?" it is probable enough that some external agency will come to work that obligatory attrition for them.

Notice the work, poor though it be, of these desert animals. High and low alike are almost constantly running for their lives. There are these multifarious tracks. There are the burrows, nests, the towering labyrinths of the termites. Verily, the behest of obedience and binding work went forth to all animation, before it obliged the noblesse in the first man. Is not that giraffe lofty enough; and is it not strong enough to do the work of a steam crane? Yet it is sent panting by yon puny carnivorous messenger. Is not that lion powerful enough? Yet it is commanded to contract and crouch before risking a jump. And are not the various perfections and careful preservations, and accelerated multiplication, and ease and safety of other animals, merely a price for the service they render or pleasure they afford to Man? . . . . . .

Men's souls have been prepared by being commanded to be contrite, and they have been taught to obey: the only true means towards understanding, and that "in part" only. They have been prepared by the earlier masters, the tried patriarchs of the deserts, by Hyobe, or Job if you prefer it, and the rest: till it was time for the Great Master Himself to assume our shape and to call forth the long projected and long promised

inauguration of the last and most sublime of the successive metamorphoses aspiring to the divine. You see the refinement from the time of actual human sacrifices in bone and flesh,—a matter of a few minutes or a twinkling—to this time of commanded self-sacrifice of body and soul, from one end of the intelligent period of life right through to the other. Humanity has its special duties. They are very hard and very trying duties, with much up-hill work: but humanity is bidden to hope that the result will be a happier state than even the cultivated age of the Elder Cato or that of Michael Angelo. Meanwhile, the diligent study of those commands destined to survive obedient heaven and earth, and the unremitting practice of ennobling duties has begun to show such beautifying results on Earth as it is hard to express even in poetic ecstacies. Nor is this all. The final development of the primitive, crude, stern Creed, has promised us a profusion of little harmless pleasures and refined delights surpassing the proportion of our toil. But the work is as yet only begun, and consequently the best of the recreative joys are still untasted; and the amusing toys still unpacked. And they who are most endowed with means should be best aware of the immensity of labour which still waits to be done. Let them not be idle, or misoccupied. Let them get clear of the epidemic of omnifarious censure. Let them learn first to distinguish between masters and mountebank amateurs. Let them be sobered of their drunkenness caused by wild news and idle novelties. Let them become aware that before attempting to be better than Christians they should try to be better Christians—it will take all the time they can spare,—beginning, perhaps, with such little exercises as practising abstinence from scandalizing their neigh-

bours: exercises pointed out in certain Corinthian Letters. These exercises may serve as very necessary examples to the other class. And above all, let them remember that Slander, even so much as there is in an allusion, a word, a jest, a grimace, an indulged thought, is more un-English and more shameful a disgrace to a lady or a gentleman, inasmuch as scarcely a millionth part of even its most flagrant forms are yet treated as criminal. Nay, let them jealously watch that their daughters and sons be not the first engaged in spreading news of family quarrels; that they be not clever and quick in what is called finding out the ridiculous aspects of their acquaintance: lest they soon learn to lessen and sneer at and insult their parents, their teachers, their rulers, their Divinity—a fashion alarmingly spreading upwards in this free country—till growing top-heavy they will obey at last that natural law which will send them, and their indulgent betters, to the deep. Let them laugh by all means in mirth and joy and fun and decent emulation—and it will do even their looks and health more good than flunkey giggles or flunkey sneers. But let me think again of that little, yet still increasing work, which has been done already, and let me conclude these introductory remarks hopeful and joyous in the words of St. Luke (ii. 14.), *Δόξα ἐν στύψίοις Θεῷ, καὶ ἐπὶ γῆς εἰρήνη· ἐν ἀνθοώποις εὐδοκία.*

LARGE ANIMALS.

BEFORE proceeding to the chronicling part I will simply note without comment the inclination of the backs of most quadrupeds in these undulating plains. In the antelopes, rabbits, and such like, the dorsal line is raised from the neck backwards; in the giraffe, hyena, jackal, and the jerboa, the dorsal line usually falls backwards. The two inclinations are combined and balanced in the vaulted back of the desert camel.

LION.

Lion's fresh tracks, very much like the prints of a human fist, I saw only once, but then they went in and out of our camp, and were made during the night. The poor brute was attracted by some venison offal. Some unknown "true prince" in our camp may have shielded us from the lion's paws. One human misery drags others in its train. Had we possessed such a thing in camp as sense for sanitary considerations, we should have been strict about the removal of pestilent offal, and the lion would not have come to do the kindly office for us.—The apprehension of our Bedawins from lions was great and constant; and wondrous reports kept circulating among them. Other people's camping

grounds in Dar-Foor we certainly found fortified or rather made to look formidable by circular embankments of thorns "against the wild beasts," and ready to be set on fire round the camp at a lion's or panther's approach. But we ourselves were not just then alarmed into such precautions. In Khartoom I had the risky pleasure of feeding and stroking a young lion the size of a wolf. There I saw also tame

GIRAFFES,

Kept as pets in a garden, and others travelling in a Bedawee's family caravan. In the third quarter of our route from Dongola to Um-Bahdr, they were, as they ought to be, more frequent than lions. Their tracks, with widely scattered prints of very unequal sizes, were a refreshing feature on the ground. Seen in a wild state only with a Bedawee's eye or a telescope, it was rather surprising to learn one evening that two servants came near enough to a couple of these wide-watching fleshy beacons to attempt their lives with pistols. One day I rode by a skeleton of a young one as it was beautifully stretched out in profile, apparently intact, wanting only the skull. It is a curious feature of this impulsive country that this tallest of present animals should tread about the very burrows of the equally watchful

JERBOA,

The smallest quadruped we met with, and which is also in form the counterpoise of the giraffe; inasmuch as

this squirrel-like rodent has practically no fore legs, only fore-paws, with curved, tiny white claws. But in compensation its kangaroo-like hind-quarters fit it to jump the length of a giraffe's stride. Nine out of ten acquaintances of this lovely animal, if asked what it resembles most, would answer "*a bird.*" Its feather-like tail is even longer than the more bushy one of the squirrel. Otherwise this tail conforms to the fashion of the other grandees of the country—camel, elephant, giraffe, lion; but closest to the first, as the equal broad vanes cover rather more than half the great length of the tail. During all our wanderings only one jerboa was caught; and though I promised to the willing men a price, which made my colleagues call me extravagant, for each living specimen up to five, none more were forthcoming. [I regret having lost the portrait of the one mentioned, because I think it much nearer the truth than any illustrations I had been heretofore or have since been shocked by.] Its soft fur is the colour of the desert sand, but lighter and darker motes make it shine like watered silk. As in North Africa, so here in Dar-Foor this mysterious pet—honoured with an image on an Egyptian coin—was found in the very same range with the

Two-Horned Viper,

As one of us found out to his horror when that small, thick, pale snake was sitting up in his tent, and hissing him in the face. The two or three men who rushed in at the alarm, and others who eagerly watched round the tent, were, however, quick and ingenious enough to prevent its venomous, but not harmless gentle strokes,

and to make the dead worm hiss his last in a camp-fire, lest its mate should affectionately come to track it by its perfume. Another more slender specimen I found emerging among the thorns from its hole a few yards from a tent. From one or two yards' distance, I kept its interest fixed by polite gestures of sincere admiration while I waited for an instrument "which indicates water and other hidden treasures," *i.e.*, a serpent-catching stick, cleft like my beauty's double tongue—*πρὸς Κρῆτα κρητίζων* (playing the Cretan against a Cretan). I had the satisfaction of educing the attentive, playful flirt, till about twenty inches of its length appeared erect above. But at the approach of the servant, more prompt than courtier-like, it slunk back at once.

A Larger Snake (Rhinoceros Viper),

Thorny-headed [you see thorns and horns are plentiful in these silicious realms], of the thickness of the arm and the length of a man, we met on a journey when I was just crossing a freshly-filled channel of two paces' width. It swam, not very fast, and apparently could not dive, for it was birched and bludgeoned to death in the water by the excited Bedawee infantry. This occurred at the end of June.

Snake bites occurred, according to the doctor, near the other camp; fortunately within reach of the usual drastic remedies—ammonia inside and out, and distilled spirits by the pint as draughts.

The Boa Constrictor,

Killed by our Bedawee friends in the same (north-

eastern) part of Dar-Foor as the other snakes, but early in February, measured 0·4 of a mètre round the waist, and 4·7 mètres in length. When pounced upon, it was just engaged in the interesting occupation of shedding its last disguise, part of which masked its own eye. The ancient zoologists are justified in calling this serpent by the name of the cow, whom it was supposed to embrace and suck; as even this specimen was found in the very presence of the herds of antelopes called

Wild Cows.

It was killed within two days' journey of the wells called after these very "cows"—Bagareeyeh. Remembering the lost portraits I made from the magnificent heads of the only two which were shot, I must say that this Oryx has very appropriate names. Their weight was estimated at over four hundredweight. The horns, however, and the legs are truly antelopine. The specimens I have seen in zoological gardens I think very poor ones. Their black horns are very beautiful: circular in section, of an arm's length, bent over the back like a sabre, corrugated ringwise along their thicker half, where they begin to draw out slowly into the sharpest of horn points. From my imperfect experiments and estimates, I am inclined to conclude that these are the hardest and toughest of all African antelope-horns. When the animal is standing quietly, the points—hardly a span apart—nearly touch the posterior part of the spine. The whole arrangement seems eminently calculated for protection against such a closely besieging foe as the constrictor.

More than a hundred of these large game were one day descried ranged in line, while one was galloping

up and down as if drilling. On another occasion (July) the caravan crossed the fresh tracks of a wide and dense stampede; the lowest number at which the deer were estimated by the expert Bedawins was four thousand head. When wounded, they showed fight; but they were the most difficult of all to stalk.

Other Antelopes

Were numerous, especially beyond Bagareeyeh,—in parties of five at most. The smallest of the desert deer, the much sung ghazel, was almost the only species in the poorer parts. On the route between Dongola and Khartoom, and Dongola and Um-Bahdr, about forty ghazel and perhaps six other deer were shot (the wild cows included) in about seven months; but it should be remembered that the party was not on pleasure bent. On the short distance between Um-Bahdr and Tendelty, the doctor, an excellent shot, and more at leisure, laid low about two hundred head in about the same time. If I recollect right, more than half this number were game larger than ghazel—but no wild cows; but the remainder were much smaller than the ghazel. The dark Ariel looks like a larger ghazel. The dark Tehtel, with its gnarly horns bent sharp like an ant's feelers, looked, with its long pointed head, rather savage for an antelope. Unreflective people usually called it "ugly."

Of Small Game,

Hares and rabbits were very rare north-west of Um-Bahdr. A species of pheasant and the familiar guinea-fowl appeared frequently—in twos or fives like the

ghazel—in the lowest of the thorny thickets. At Um-Bahdr a species of wild goose and some wild duck were shot. At the same place pigeons were numerous. No pigeons were seen between this place and the Nile; in the vicinity of which river we got the only sand grouse in the country traversed. Snipe were also bagged about Um-Bahdr. Of cranes, one or two flights were seen. They are relished food in Khartoom.

Birds in General.

Um-Bahdr was, under this head also, richest in species and numbers.

Small sparrow-shaped birds, bright green in colour, with crimson eyes, twittered in the denser Mimosæ, which sheltered also a pigeon-sized, dark blue magpie type, with very long, thin tail. The bright little birds remind me of our friends on the Nile, the bright, purple-winged fingers. Whenever during the day I was sitting in the covered end of the barge, these miniature birds would flutter and sit on the bent bulwarks often not farther than two spans from my hand, just like the small ultramarine-tailed lizards of the same place and of other parts of the Nile. From the towering Gangaloos and other large trees, different large birds could be scared away at most times—magpies, owls, and narrow and long-winged creatures, very large, looking like sea-birds. The most thickly congregated birds were found in low and close thickets, amidst a network of channels and holes. They were greyish brown, dove-like, and they hung the low branches with a multitude of loose bottle nests. I believe the majority of the nests here are sheltered from sun and deluge by being

built in covered holes in soil or wood, or by having entrances in upright surfaces, or by having roofs like bottles,—the types of certain straw huts of the neighbourhood,—or by having lids like some spiders' nests.

In the delightful little forests near the Gabrah wells, about a hundred kilomètres north-west of Khartoom, turtle-doves were as common as they are on the Nile. Other singing-birds were also plentiful about the Gabrah woods.

Vultures and other carnivorous birds were most frequently seen in the more open parts of the desert. Scores of them would sometimes—at game days—make themselves at home quite close to the camp, and not be disturbed at our walking to and fro within a few yards of them. They are useful sanitary agents.

Under this head comes an anecdote. In the tropical garden of my pleasant hotel in Cairo I once asked for a certain number of eggs for breakfast. The excellent waiter brought me a larger number, and accounted for his thoughtfulness, by stating that eggs and birds in general were small in Africa. "The ostrich, for instance," I replied, with a quickness of repartee unusual for me, and consequently hurt the fellow's feelings, because, species for species, birds may be smaller in Africa than they are in Europe.

Ostrich tracks,—each print the shape of a huge broad scorpion claw with its point bent inwards, and with the soil turned up at the point,—were frequent in the thorny tracts. Egg-shells and feathers—the latter a little cemented to the soil by some shower—were also found. But they themselves kept as far off as the giraffe. In places most frequented by them, these tracks were accompanied by prints of what we camel-riders thought *little* hooflets, but which were, in reality, the

tracks of the pursuing equestrian Bedawin. One day we had a call from two Bedawins, who offered us one or two ostrich-skinfuls of mixed feathers for sale. The hard thick skins are like sheet-iron, and preserve the feathers well during the jolting of weeks or months. Not far from Tendelty a solitary ostrich hazarded a look through a theodolite, deserted for the time being. The returning geographer, in great excitement, looked round for his gun, and hastily communicated with a friend. And he would, in all probability, have shot the bird had it not occurred to his friend that it might have been a tame one—which was the fact.

The Jackals

We found the noisiest of all the wild beasts of these silent parts. They sometimes did their worst to serenade us in woeful chorus, whining and wailing like desolate infants. They were not more melodious than that object in a Caireen orchestra which called forth the remark of a friend—"The man with the voice." But these wolf-like howlings and whinings were certainly music compared to the outrageous voices of English hawking beggars, making public charity which need not be noisy, or divulging mismanagement which should be kept dark. A little more pleasant, from its unexpectedness, was the voice of

The Frogs

We heard, after some rain, in a billowy, rocky plain, sprinkled with torch-ends of grasses by way of vegetation. They must have had a good long spell of tropical torpor —proportionately as much as Edmond About's resuscitated mummy in "L'homme à l'oreille cassée"

TORTOISES,

Dark and fair, sometimes as big as a man's chest, were caught even in regions which are both tautologically and alliteratively said to be "absolutely void of every vestige of vegetation." They move about in the driest seasons, and their frequent occurrence, moving forward with backward swimmer-like thrusts, and their undefined tracks, which look like those of some animal gone in the opposite direction, made them quite a feature over the whole range of our travels. Lieutenant Hassan Effendi, in white, priest-like robes, and red, tasseled crown, looked like a statue of the chaste Oriental Venus Astarte on her gigantic lady-bird in procession, as, standing on the back of one, he was slowly carried along by it. I spoke elsewhere of this animal as a fortress, and very well guarded are the few openings of it, too: ἰώ, χελῶναι μακαρίαι τοῦ δέρματος, "O! tortoises [and other stout-skinned people], happy in your hide." The skin of its extremities, seen when the brute is moving, is a thick coat of armour, bristling with sharp spikes. When the limbs are withdrawn, their lurking surface is more forbidding than the powerful shell. It would not do to be tempted by the edges of the holes, because the projectiles might be out in a shot, and that shot is a bouquet of sharp nails as good as steel, with a stem like a palm-trunk and just as lacerating. The head is an animated helmet—a self-working guillotine—"beak" is an appropriate name for the *whole* head. I cannot see how much harm can come to a full-grown tortoise from any other agencies than a pair of hands. On the stretch of territory north of Bagareeyeh these animals, or their fresh tracks, might

be seen at every third day's journey; and their indications, including shells near camping-grounds, once or oftener every day. They appeared throughout more frequent than the quicker reptiles; as, for instance,

The Lizards,

Of which the small oily species is seen now and then, "frying in the noon-day sun," as an Oriental poet has it. Nor were their tracks—like small convolvuli—seen as often as I expected. The tracks of the rough-skinned lizards, of the size of a man's arm,were seen in the vicinity of small compact heaps of stones, and the "desert box."

The Crocodile.

The first and last we saw wild in our ride along the river was a couple of days' marches above Wady Halfa in winter. It was conspicuous on a sandbank moated round by the river. As my glasses showed me, my companion's ball, fired at two hundred yards, struck the water a couple of yards from the brute's eye, close to which it then rebounded. After jerkily turning his head in our direction, the crocodile lazily rolled over opposite into the water.

Ichneumons.

Two of these little brutes, the most sensible among the destroyers of the crocodile, and insinuatingly resembling the young of it with their lizard-like thick tails, one of us got in Tendelty. I cannot tell whether they were brought to Foor to relieve the poor crocodiles' pretty, perfumed, and sun-poached eggs, in one of the lakes of the Sahâra, or whether they were kid-

napped from the Nile. They were a double mistake when loose in our camps. Inquisitive by nature, they were constantly darting about camp, invading every tent, bothering every camel and tired man, and ferreting into everything. I am not sure whether the impudent brutes have not had a lively dive or two into our very soup before it was put on the table. The soups, made sometimes with dark-coloured waters, looked and must have felt uncommonly like the hot *potage consommé* which flows from the great equatorial tureens—to speak in fashionable *langage*. Certain it is, they were as particular about their personal cleanliness (more refreshing than this slovenly stereotype phrase itself) as ourselves, wallowing with great gusto in any basin of liquid not in actual use. Heavy and hard projectiles innumerable were thrown at them by high and low, but they did not seem the worse even if made use of as projectiles themselves. From a man stretched out in rest or sleep he would not skulk away as the lion did whom we formerly spoke of. O dear, no: and you are soon aware of the bleeding hole he has sunk in your thumb or toe. Thumbs and toes look wonderfully like crocodile's eggs; and the brutes' studies of analogies might lead one day or night to some one waking up with his nose or ear bitten off.

Fish

We caught at Khartoom, and stuck them in the ground: they had, in this country of thorns and horns, two or three long bent spikes of a finger's thickness grown out of that hard armour which is to them helmet and corselet. The size of the plump species is over one foot. They taste well, when properly cooked.

SMALL CREATURES.

Beetles.

Let one species of scarcely fly-sized, emerald-like beetles represent the coleoptera. They flourish along with the bloom of the acacias, and vanish with and on the leaves. The balled tassels of flowers being apparently all stamens, the anthers appear one uniform coat; but the anther-like brilliant beetles settling thereupon relieve them with singularly good effect. These we found congregated in great numbers; but no other coleoptera. I said they vanish on the Mimosa leaves, because each beetle exactly covers a leaflet of its own colour.

Ants.

The centres of distribution of these creatures seemed to me the few ranges of small sand-hills pretty well covered with vegetation. Here, indeed, appeared suddenly several species of ants, and other wingless formicate hymenoptera, which would be taken by unzoological people for ants—species of Mutilla. Both formicides, and the more elegant-looking myrmicides (having two knots between thorax and abdomen, while formicides have only one), were represented.

Lunching and resting once in the open without a tent under a tall tree on these interesting sand-hills,

these vivacious guests appeared in some numbers, but not in crowds or processions—say six to ten inches between the quick moving individuals—to adorn and cheer our lowly meal. The Mutilla, half an inch or more, with its short bent feelers, horning out from a tremendous square head, made itself very conspicuous in its harlequin dress—with a verdant white fur, the colour of gum-tree blossom, something like an ostrich's, or crane's tail on its abdomen, the rest of the body being as dark as the bark of the gum-tree itself.

But it is the real ants—size between a quarter and half an inch—whose more familiar sight gave me the most pleasure. Observe the grace of movement in the two elbowed arms-and-hands—the feelers. These feelers stretch forth from the Oriental armlet—the mandibles close into a ring. The ring of mandibles fits into the head, like the oriental armlet into the square bag which holds the charm. Or let us call this junction a tiny seal ring with a stone—eyes, the initials. The next jewel strung on the silk thread, which seems to hold the insect together, is a pear-like amber mouthpiece—the thorax. To this are strung one or two diminutive garnets. The rear is closed by a bigger or smaller pearl, with point at end. And thus the whole ear-ring is completed—the feelers may clasp the lower contour of a pretty ear; and, perhaps, whisper about formicine virtues, of which there are many. Never before did I come across such a glorious species of ant as I met here. I was acquainted with those ants which looked as if composed of carved and polished ebony, mahogany, amber, and the like. Nor did the haunts of the amber-inlaid darkish mahogany of Hypoclinea quadripunctata escape me. But the species I saw here would have made anyone of a hospitable mind

jump for joy—if such a feat be possible in loose deep sand. I ungratefully forget—and I have lost my specimens—whether it belongs to the tribe with the Latin or the Greek name; that is, whether this beautiful animated period has only a comma or colon between its second and third main part. Its colour is all over that of a pale rose, its gloss that of silver. It is a fairy-like blending. And, as if nothing should be wanting but song, this jewel of rosy silver is circumfused with the most delicious bouquet of which formic acid is capable.

Hornets,

Measuring an inch and a half along the body, and two or three inches across the wings, flew buzzing and gregarious, like Saturn-shaped planets, round our devoted heads whenever we were caught under tent during daylight. If we timidly hinted at a song when speaking of ants, we have got that now with a vengeance—perhaps as a more sensible exponent than a picture, of the ill-advised expression, "A symphony in blue." For these galling troubadours were accoutred in shining armour of beautiful iron-blue, wings and all. Here are the details of the instruments:—

Like two twists or knouts, in a pair of graceful curves, the feelers seem to serve as elastic drumsticks to the

Tam-tam shaped head—more curved than kettle-drums usually are.

Eyes—a pair of cymbals.

The thorax, a hexagonal concertina—to fit into the animal's wasp-cells.

One pair of stringed wings, hooked together during

the flighty performance, looks, and is acted on by the Æolides, as a harp—narrow but thick at the base, then expanding and terminating in a pleasing curve.

The other pair of wings, not mathematically congruent with the first,—to the glory of variety in nature —a tiny "wing" (piano). Or if you are disturbed by the size, a crowd with a genuine bow (bent well) laid alongside of it.

To the concertina thorax is attached the tiny pin with its tiny triangle, on which hitches by its S handle,

The lute-like hurdy-gurdy of a pointed abdomen—or the horn, from which the creature's name is derived.

The orchestra is now duly arranged.

After this I will force myself to make short work of them as I did in the tent. A lesser Ruskin, fond of massive bindings and books worthy of them, I arose champion of the party with an iron plate, which had preserved the cover of a field-book during ruinous camel rides. The hunt, or rather fight, seemed to have the same proportions as hunting one tiger with twelve elephants. Several hard knocks from the metal field-piece on each of the floating "enemy"—Furies of the Æneid—were by no means enough. They hardly stunned, and seemed only to puzzle, both combatants. To kill them, I was fain to secure them between a hard surface and the sharp edge of the weapon.

Butterflies.

Grey night and afternoon moths, with more wing than sense, and consequently running into precisely those elements they are not apparently meant for, abounded in the more hirsute parts of these countries,

as they do in all others. Plates and basins of liquid became tiled over with them. This, in the case of a washing-basin promoted the cleaning and perhaps polish of the skin, like eggs and bran in cases where unctuous soap is not thorough enough; as is often the case in these countries of sand-blasts, which remind one of that tempestuous endosmose of mud in the faces of Illinois children "not washed out yet." * Try moths.

The familiar case of these moths playing the may-fly with our soup,—or, as in some other country they are called "the bloom of the river,"—can be borne too. In these dry places and seasons in which the wet thermometer shows twenty or thirty degrees below the dry one, the cooling by evaporation, which toasts a fresh slice of new bread in ten minutes at night even, spoils soups and other greasy dishes, when uncovered, in a twinkling. We had no flat ovens of hot water or hot sand under our several plates, like our friends in India during the dry seasons; and, therefore, the non-conducting panes or quilts of butterfly plumage on my soup I thought rather grateful. There was nothing positively objectionable about the clean-looking metallic layers, nor even in the taste of these senseless shrews when, elevated in the ducking stool of my spoon, I happened to swallow some. When a boy, I used even to catch butterflies for a dainty, and I am not sure whether some good-for-nothing Roman, or some imitative French *fainéant*, has not "invented" a dish of them. Besides, they protected my soup from worse—flies, for instance.

Other members of the moth family made their appearance in the trap of our tents. One, the largest, I

* In the description referred to already of the "Illinois Tornado," *Quarterly Journal of Science*, 1874.

note, for its great similarity, if not identity, with a beautiful European hawk-moth; the whole moth flying with its forehead curl,—a mock carnation of "rouge lie de vin,"—borne on wings which recall a legendary floating litter of spears, or of "soft harmless arrows" (the feathery scales), like an ode of Pindar's.

Termites

Caused us the greatest trouble at the banks of the river. There boxes and other packages had to be kept raised over the sandy ground by stones, bottles, and such like material. But even the slippery glass bottles did not curb or rebuff the steady aspirations of these small shadow-loving pale vermin in their mischief-working stage. Looking like voracious sacks with a pair of shears, gimlets, saws, &c., at their mouths, they soon roughened the polished surfaces by depositing the slow volcanic upheaval or quick growth of their fast-drying mortar, till they could scale to the vegetable shells of the packages. It did not seem to cost them more trouble or time to bore their entrance through compact sacks or wooden boards than it would for water to penetrate an empty sponge. They penetrated into ironclad boxes by chinks caused by the heat, invisible to the human eye. Packages, tent carpets, with tarpaulin below, even tents were shifted twice a day. And during the intervals everyone was watching, examining, clearing the invaded parts, throwing away wrecks, saving the remainder, and repacking. The camp was besieged, everybody belonged to the termite corps (I dedicate this expression to French administrators). Never was Jack Horner more absorbed in the corner eyeing his

Christmas pie than each of us was at that Christmas in Dongola, eyeing our Christmas boxes and putting our thumbs in to contend with the pale but lively "plums," for our bread destined to be eaten where none is procurable.

Fortunately we were safe from them in the dry clear deserts, though they stirred up the camp again near the more wooded wells, and near some, but not all, of their colonies of towers. Some of these towers—and whole colonies of them, too—were much higher than those described elsewhere. I remember some on a level with my saddle when seated on the huge Soudani camel, which was ten feet high on those I usually rode.

Locusts,

Or rather grasshoppers of a finger's length, I remember having seen in Dar-Foor only during a few days at the end of June, in small flights, among the thinner and barren woody thorns. They were not, as was the case in more western Foor, numerous enough for the Bedawins to hunt and gather for food. (To bring them down in clusters, the men intercept their flight by a wall of smoke from a ravine or dry channel.) They were about six inches or more across their wings, and of all the colours of the rainbow. At the approach of a camel-rider to within four or five yards of a tree on which they were perched, they would start off with much noise of wings—such as sparrows make—and settle about twenty or thirty yards further.

As they, when sitting, look like blunderbusses, so, at our approach, the noise of their flight sounds like the command or act of "prrr . . . esenting arms." Or, as when

both at rest and in motion, they look like the first models for folding fans, so also their flight resounds like the simultaneous opening of the fans of groups of ladies suddenly hushed and flushed at the entrance of "mon Prince" into the ball-room; and as those dear fluttered creatures would, when rising, bow low and with a graceful slowness, so the treehoppers in their flight between two trees bearing pods resembling themselves would swing in the lowest of arches.

Whenever they are seen floating high in sustained flight, it is not a sign of their spontaneous aspirations and strength of wing, but only indicates the direction of the impassioned wind, for the time being, of which they are a sort of volatile weather-vanes. Those of them who are bred and brought up to self-ignoring and noble devotion by being kept down can keep in their natural region and birthplace; and when approaching the whirling meshes of the curling incense, they humiliate themselves, fly low, near, and almost through the flames, where the smoke wall is thinnest and slowest, usually unscathed; while the weaker ones are borne aloft by breasts puffed up with vanity, into the thick of the incense which, whirling in expanding spirals, turns and giddies their top-heavy heads, thus increasing the momentum of their final precipitation.

Pharaoh's "Horses."

Other Orthopters, known elsewhere as "Walking Sticks," but called by our Egyptian friends "Pharaoh's Horses" (lean kine), and looking like roughened pale halms of the desert grasses, two or four inches long, are seen stalking sometimes over the sketchy landscape.

Flies.

Though the domestic flies were often travelling with us, the places where they watched with their Argus eyes and kept us awake most, were the belts round the wells, where, by the momentum grown out of *numbers*, they became a plague. Bless ye, great Frenchmen who stood our allies in the desert! What would we have been without your gift of intrigue, your sweet and poisonous fly-paper! Aye, your diplomatic powers extend over the most barren spots of the globe to work consolation to the wise, at least as long as they abstain from your poison-green vegetable preserves and the poisonous papers of your popular literature. Look at that sumptuous banquet spread on the floor of that dining tent—look with the ecstasy of our "poetic" friend X., at the five metallic dishes, artificial cameos (tin-coated with glazing). Look at the countless thousands in their dark uniforms feeding and boozing to an extreme, and darkening their circular dinner table, as they, overwhelmed with hospitality, roll over, covering the "boards" and the floor in voluptuous girdles. Your enemies, who are found wherever they can gorge themselves at other people's expense, revel in your skull-adorned paper, thinking they quaff the bacchanalian skulls in the Walhalla. Who has heard of a discobolus performing so mighty a feat as is done by these disks? Well did the wiles of the Gaul do the work of one of their emblems and nicknames, and save us the expense of plying their temper.*

To the *Camel-flies*, flat, light-brown, hard-skinned,

* A little gunpowder smoke keeps flies off, according to the "United Service" paper I referred to under my chat on climate.

and tough-lived like their supporters, I am indebted, I think, for the friendly attachment of the first camel I rode. I have been reminded by amused friends that during my first ride, instead of carrying a "wholesome" whip of rhinoceros hide, I was observed keeping these flies off my camel's neck with a long-handled fly-brush of palm-leaf-strips, in shape of a Mussulman horse-tail banner. Think of that sovereign haughtiness of the Khaleefs who swept over submitting nations with fly-brushes! What sarcastic irony from these supercilious Saracens! There were, as my "Exeter Hall susceptibilities"—as they were called when discussing matters of discipline—are sorry to say, feats of vivisection done in our common tent on some of these hard flies. Gradually mutilated with a pair of scissors, till no more was left of them than the vigorous six legs or fewer, and the least bit of chest, they still kept running along the carpet quickly till they got the *coup de grâce*. I must say these flying leeches were mighty irritating to a thin skin, as even their very feet, broad as a camel's, felt like suckers.

The interesting winged infusoria (considering sand as liquid), called sand-flies, were at last discovered at the grand camping-ground of Um-Bahdr. Their effect was felt and seen long before we had leisure enough to notice minute details of nuisance. Plastered against the tent walls, dark-coloured on the inside, we discerned them looking like a gentle sand-drift. Like most of the institutions indiscriminately called human miseries, these sand-flies, minute as they are, can elevate man—as their element can lift his granite sarcophagus. For, as Socrates kept himself raised in the regions of wisdom over his domestic torments, so you are safe from these sputtering and vociferating animal shooting sparks by

keeping yourself about fifteen inches above the sun-smitten ground.

Gnats.

Intemperate mosquitoes were, in this intemperate climate, at least during the very dry season, not very conspicuous robbers of our blood, which was badly enough used without this. Yet the gnat-veils formed a standing feature in each of the better appointed sleeping tents for various reasons, more especially in the regions of spiders, snakes, scorpions, flies, sand-flies, malaria, and

Camel Ticks.

Like small lentils or acacia seeds, these creatures appear in great numbers round the watering-places, and on tracts nursing some drowsy vegetation; specially under sun-plucked trees, sufficiently tall to induce a man or camel to squat beneath and imagine itself in the shade. On the motley tassel formed by their legs, consisting of alternate finger-points of dark purple and white, these marvels of animal toughness would run in numbers to enliven our dress at ill-chosen lunching places. On mis-chosen camping-grounds some of them would make our dress their tent, and find their way to our very skin. And their small harpoon of a head once picketed under our skin, the flapping and fringed wart cannot be removed by any amount of soaping and flesh-brushing. When the body is cut off, the head-points fall out in due course of skin restoration after pimples.

Awakening from a nap one afternoon in a lamentably ill-chosen camp—with an epidemic brewing alarmingly within it—I mechanically swept my hand over the roof of my head. Feeling a *crust* on it, I raked out a looking-glass and found the top of my forehead besmeared with blood. Nearly under the head of the small, net-less couch, on the sand-coated carpet —it was hot stormy weather—I found something which looked like a horsebean, light grey, and shining in high polish. It was a camel-tick, full of my blood, which has possibly saved me from congestion of blood in the head. I regret to say that the brute looked sorry and rather hurt — I must have thumped it during my sleep. But I saw others fresh from their feast tripping along briskly as if very busy. They arrive lean, dark, small, and melancholy-looking, like minute shreds of the desert porphyry; they depart in bright and polished wedding-dress, elated, like those light, polished, granite boulders. The motley thin legs remain the same; merely becoming wider set. Four or five times as broad, as long, and as thick, when full, as they were when fasting, their thickened skin and their expanded bulk increased one hundred fold—in an hour, perhaps. The camels having been looked after by the Bedawins better than ourselves by ourselves, a camel was rarely pestered by these ticks.

On Scorpions.

In those regions of our desert where nature can be spoken of chiefly in geological expressions, and where even the festive ceremony of a rare rain has much of a geognostic nature in it, there the scorpion is no more

conspicuous—less so than the tortoise—than the snakes are. These possible germs of myths about polycephalous harpoon-tailed dragons of the Orient—with the erect, knobbed, and beaked tail, and the broad fangs looking, all the three of them, like heads—made us often wish to exchange the less barren regions where the scorpions live for the cleaner desert—with only half-a-dozen sealed up trees, looking like the side views of massive-headed seal-rings, on a day's journey, and with some metal-like grasses for the—almost sole—use of our camels. As it was, we just came among them when they began to move restlessly, and their venom was becoming full-fired. And it was the worst species, too, we met as a rule—worst according to the Bedawin experts—a large dark species. They were not of the porphyrescent colour of other smaller desert creatures, and many of the desert seeds; but were of the hue of rotten leaves, march mud, venomous toads, and crocodiles.

As during three or four months they always haunted our tents, so they did our thoughts. Their bodies were as broad, and almost as full, as a finger; their fangs as broad and plump as those of small crawfishes. With these in the square position of a weevil's feelers, they usually measured, with their snake of a tail, from three to five inches. One brought home was pronounced to be equal to the largest ever preserved in museums or perpetuated on zoological plates. They found out almost every camp, and we found them usually when starting in the morning, under the packages, saddles, and tent carpets. One was detected by a colleague in a pocket. Another stung the same man before lunch in his tent. It is curious that this should have been the same man who received the visit

from a viper. One was caught during a meal on the back of a chair, crawling towards the sitter's neck, while he was just scanning the ground to see whether any were about. My servant more than once turned them out of my bed, usually a little before I turned in, but once, at least, from under my pillow immediately after I had risen. Often, no doubt, they were removed without people saying much about it, as bad cases during epidemics are usually concealed by the officers. The nuisance was not quite so bad, or good, however, as to make us desperately face the foe and try to have done with it, by repeatedly allowing ourselves to be stung on purpose, as a sort of inoculation said to steel the frame against the pangs from any subsequent accidents. A special short pair of tongs, however, was at these times always with my ready servant, and he used grimly to exhibit to us with a grin, while we were at table, any remarkable specimen which he happened to catch, secured in these tongs. I did not encourage him to catch them as *sans façon* as servants in India do —attracting the vermin's several eyes by moving a short straw on the ground, like some Pharaonic locust, and then elegantly taking hold with two fingers of the tail-like end of the abdomen close to the sting. The smaller and slender species with narrow fangs of gall and bile yellow—which warns us when seen in the ribs of deleterious mushrooms and in the flowers of poisonous plants—I found to be more numerous on the main stream and in the Delta of the Nile. These crawl with tail curled up, in all seasons. When we asked our Nubian friends about the man-slaughtering power of the dark hard ones, we got the indirect answer that they will kill a camel!

As soon as our friend was stung, we took hold of his

arm, stopped the surface circulation by bandages above and below, tried to squeeze out the venom, and then applied ammonia on the wound. The animal, which escaped, was "only a shrimp," a young one, and the pang did not extend beyond the bandages, nor last long after the burning with ammonia, that is, about twenty minutes. We did not apply ammonia inwardly. The general circulation of the blood was also sufficiently accelerated from the natural excitement to make any stronger expulsive stimulant than a safe glass of wine unnecessary.

Our usual matitudinal brushing was supplemented by our brushing with the pencils of our visual rays even the interior of our sleeves, pockets, and the like. Our camel-coloured boots, shaken after work, we shook again in the morning, and even before, from dust and sand usually gliding in over-night. But in the scorpion season and region, we did this ceremony due to ungrateful soils with more attention, as we were richer by one more interest in life. Moreover, we did not change boots for shoes in camp, but were rather careful to have our nether sleeves within the shafts of the boots, or in gaiters or knickerbockers. (That part of early civilization in the deserts, mentioned by Strabo, which was manifested by the wearing of gaiters and boots of hides and skins may be owing to the influence of the scorpion.) And we had an objection, especially at night, when at table, to having our feet reach the ground, which we kept sweeping with the brooms of our looks. I do not know whether this *suspense* made us not look like prisoners—or expounders of some doctrine, expounders self-concentrated, previous to their ejaculation of new rays of light which, gathering into a meteor, is to carry them aloft like

young Lycoses (a species of spiders floating by balloons made from the threads they "ejaculate"). A supply of little iron saucers to put—Indian fashion—the bed-legs in, was desirable: scorpions do not cross water for fear of being killed by even one drop going into what we may call their lungs. I regret we had no garlic, else I should have profited by Strabo, who says the ancient desert people gaitered their beds with the juice. (I wonder if it were owing to the presence of scorpions that certain nations grow and eat this plant—and whether it is to the British sailors, from whose ships the worms would crawl on to English soil in hot summers, that the introduction of garlic into this country is due.) We had the dubious consolation that not many fowl-maws had to be searched for evidences of the venom, and the dinner sanctioned or curtailed accordingly.

I was told this vermin kills the viper with its bile by means of its subcutaneous injecting needle. However this may be, they were treated alike,—burnt when caught in camp.

Centipedes.

The hundred-legged and hard-coated worm which, in these parts, would bring man down by a touch of its black fork, like a strong electric battery, and make him faint, did not make its appearance in camp; or, at least, did no harm. It is strange that I should have always found this interesting creature—skeleton of a snake—at home under its stones, in despite of its multiplied facilities for locomotion.

Crimson Arachnids.

Velvety spiders of the most beautiful crimson—out-

glowing the berries of the sand-binding euphorbia — compactly formed, as if one piece, with hardly more in the way of legs than a dry cochenille, and of the size of large peas, appeared with the first rain among the thickest vegetation of the district. The denseness of the vegetation was, indeed, in singular correspondence with the appearance of the spider itself. This is one of the few full-grown and larger arachnids which a good-natured young lady or an unspoilt child would like to play with; the more so as it seems slow, clumsy, helpless, timid, and huddled up. If we were to rely on our Bedawin friends in the matter of these pellets of marking wool having dropped down with the rain from the clouds, we ought to credit these harmless and confiding creatures with the *cleverness* of the rain-born Corybantes, as they usually find themselves on fertile, soft, and very much protected ground—never in the barer desert parts where rain also falls. Yet pause, for the sake of manners—respect your authorities. The Bedawin, depend on it, knows more about Corybantes than we do. This arachnid may out-do the young Lycoses: borne, while yet imperceptibly small, to great heights, if not into the very clouds, it may, in truth, require the rain both for final development and for descent from on high.

The Big Spiders.

It is a species of Galeodes, and I have reasons enough to suppose it was the "Vorax." Appearing first on our south-western route, four hundred kilomètres from Dongola, they were most numerous, and indeed constant

visitors at wells, especially at Um-Bahdr, five hundred and seventy kilomètres from Dongola.

For a miniature of this spider a termite might be taken; but for a fuller image summon a carnivorous gyrfalcon's head, with its beak split downwards, right through; let the head stand or run on both the bird's long-toed feet. Another representative—natural size—of the spider's body you have readier in the two phalanges of your thumb. Round off the end of the second phalange, imagine the nail divided by a thick line into mock-halves. The legs are not so thick and hairy, and therefore not so "ugly," as on the huge spiders of other tropics. When running, they appear like so many polycaudal mice, of the colour of the sand in which they dwell. Where they were most numerous, they kept coming by twos and threes in the day-time, like bold spies, and by the dozen at night, like bandits—apparently rolling as if mounted on light wheels.* They did not, however, commit any robbery that I could tell (capturing flies, perhaps, was the greatest "harm" inflicted). On the contrary, they behaved like an evening party of bogies bent upon revelry. With the velocity, quietness, and ease of reflected lights from agitated mirrors, these rolling legged creatures or gnomes on magic chariots would flit over carpet, trencher stand, pole, wall, and ceiling of the tent, and from the table up the four brass tubes under and up the four glass bells round the candles, often stopping abruptly with a marvellous spring and brake power. If chased out,

* No wonder that the Greeks, with their genius for analogies—which, according to Sir Humphrey Davy, is the leaven equally in poets and men of science—called a wooden roller and a long-legged spider by the same name, "Phalanx," of which we, for certain purposes, made "phalange"—though the scorpion's "phalanges" in Greek have another name.

they would run only round along the amphitheatre of the ditch girding the tent. They seemed equally quick over, along, and *under* all surfaces in opposition to gravitation,—surfaces loose, polished, erect, or bent over. A wind-protected steep sand-slope, safe against lizards, and the despair of ants, the Galeodes would run up along the shortest line like a storm-blown balloon of light stubble; and up the outward spreading glass bells like a flying moth. This mockery of what some know about the laws of gravitation, and force, and speed, has, in the eyes of a practical engineer, accustomed to reckon with belating marches and potentiated efforts of men, quadrupeds, rolling and swimming machinery, &c., even on very reduced gradients and currents,—has, I say, something unearthly in it. Star-like while sitting still, I cannot compare them to anything but shooting-stars when racing across the firmament of our blue tent ceiling. Zoologists who know several species of the velocipede Galeodes have tried to explain their adhesion by a sort of pedal sucking; but the combination of the time-requiring adhesion with the rapidity of these shiftings makes me pause before I accept this. Is this mysterious force another case of animal electricity, having the same power over glass and wool? *Je l'ignore.*

I have said they did not intend mischief to us, unlike the Galeodes in Algeria and even Spain, who would rush against an attacking hand, armed with the steel-jaws of pincers. But they do so, we are told, and strike the four pickaxes of their mandibles into your sleeve, if not into your face. But it is *not* pleasant, till one gets used to it, to see and feel them officious to such a degree as to make electric rushes at a fly on one's collar, or maybe at a pimple on one's neck or face. The first time

I had one flash up my right arm, and down my left arm and leg, I took this animal lightning very coolly, only following with a ready glance the brute which appeared as a momentary track over me. I saw it coming and passing before my equally observant friend, in horror, could say a word about the "danger." I stood it, perhaps, as I bore, when a boy, a creditable operation by an eminent surgeon I loved and trusted. I do not know how many more passed over me, awake or asleep; but one night, during dinner, when the spiders were basking, racing, or being chased, on the tent-cupola, carpet, and the table, one again was said to have run up, *again at my right*, over my neck or head, and then down. The sudden alarm of my friends had such an effect upon me that I jumped up pale, with an exclamation of horror so ridiculous that I saw it the next instant myself. "It was really too bad. Give me that spider, M'hammed. Here, Galeodes, wait a moment, till I have all your legs in one hand. Now have a peck at my thumb, as much as M'hammed offered you of the thickness of his hand, or did the rascal present his rolling palm, only? No, no; not quite so much. That will do. Now, M'hammed, you may take him away, now I have touched his back and his head, or what looks like it. And now, M'hammed, put the things ready outside for washing hands, and the *old* nail-brush."

The servants succeeded in killing many, every night of their visits; not that our servants were quicker than the Galeodes,—I wished sometimes they were. But the spiders were coursing about in all sorts of nodes and curves of the highest orders, in a small place. This was either because they were accustomed to astound their intended smaller victims by running a magic hoop

or sand-squirting halo round them, or because they were themselves puzzled. They often sat quietly for a long time on the ceiling, till they were fetched down with a rod, like fruit from a tree. But M'hammed, though he looked by the imperfect artificial light as myope as the spiders, often plucked them from the canvas-walls with his hand; none of the other servants dared touch them. At the beginning of these entertainments that worthy would act as a sort of guide, or interpreter, introducing the light "Sandlaufer" as "a clever animal; it kills the scorpion." While he was pleased to instruct us, he held the specimen he had just caught with natural grace in his delicate hands, four legs in each hand. His easy attitude while occupied with this extraordinary subject struck me certainly as more natural than that of many a popular professor of "science" in certain institutions.

Their riding over us was not exceptional, nor partial. The very man who most clearly confessed his disgust at these animals—he minds a scorpion or a cobra less—saw one of these airy creatures one night after dinner inquisitively settled not quite four inches from his mouth, on the smouldering crater of his briar pipe. It must have run over his whiskers and moustache or nose. Think of having no moustaches! My servant, as ready to catch the leggy creature as you would remove a small feather from a pet child's neat dress, stretched his hand towards the pipe, my friend keeping still like a man—whose leg is going to be amputated. But the eight quick feet, doing the service of wings also, were soon off—by ways and turns too fast and ingenious always to follow—to complete their merry round of amazing mountaineering, legerdemain, and acrobatism, over the other three of us.

A ranging rod was usually kept on or near the table, because we objected to have them over our heads. I must say to their credit, as far as I could observe or can remember, that they did not dip *into* our food or drink, while they kept scouring over the tops, edges and brims of everything, like true acrobats. Some of us may have become accustomed to these harmless and noiseless frolics, judging from the following note I made one night, when by myself, working in the large tent. "There are, while I am bent over this . . . . again two Galeodes chasing each other, playfully, or in wrath, up and down my arms and over my bent neck—a breath—*from right to left.* Stop [the nearest spider stops]. Was it really like a breath? *I do not remember ever having been conscious of any contact while they were running over my skin:* but my skin is too thick, no doubt. . . . . The rearmost one has given up the chase for the present, and is sitting quietly where I am quietly observing him, at—no: on—my left elbow. Pretty!" The expression "jolly as a sandboy," diffused by that dreadful Dickens, is not explained yet in the dictionaries. Let me dedicate my hunting spider to the devoted legion under Dr. Murray of the coming dictionary. It may serve as a hint.

Considering that they kill scorpions, and I believe flies also, thus compensating somewhat the paucity of frogs—it would be worth while, perhaps, trying to tame, train, and keep them, as pets—as people do snakes of all kinds in other parts of the continent—or as crocodiles were tamed in ancient highly civilized Egypt. Specimens of the fierce tarantula have repeatedly been tamed with great success within the last few years; why not try to tame these creatures void of guile?

The Big Spiders in Combat.

One of these Galeodes, which was put in a large-mouthed bottle half filled with sandy clay, kept in the hole which he had dug in the latter. As soon as the large scorpion was dropped into the bottle, the spider sallied from its hole, and forthwith grasped the scorpion's tail, at the phalange next to the sting, with its two formidable pairs of mandibles. Now attend: phalanx against phalanx! The scorpion was nearly upright, leaning its branching upper part against the glass wall, and resting on the hook of its stiffened tail, or rather uroid, which looked like an angler's line dangling down, with its final hook a hair's breadth from the reckless spider. In this position the scorpion, doubly grasped, remained, seemingly paralyzed, having stopped all movement of any part from the first moment of the attack. The two pairs of powerful pincers or thick scissors, which were apparently not sharp, worked alternately with great exertion, judging from the slowness of the bites. It is evidently of these long-legged, four-jawed, creatures, and not of the smaller and venomous tarantula with its little head, about which Strabo speaks when referring to these deserts, *σκορπίων καὶ φαλαγγίων τῶν τετραγνάθων καλουμένων:* though modern zoologists call the Phalanx a genus all legs, a slowly walking cobweb, with a little knob of a body in the centre. The Galeod continued worrying away till some impatient person inclined the bottle. Then the heavy body of the nigger scorpion fell, inert, on the spider's back. Thus hard hit, shaken, and surprised, the spider let go with both

pairs of jaws. The scorpion, otherwise motionless, *slowly* turned his sting up with a wonderfully articulate twist, and pushed it, to its very hilt—the knob, which looks like a fist clenched on the murdering dagger—into the soft, round part of the spider's back, so as to make it yield a small crater. Soon as the venomous sting was lodged, and perhaps turned, both combatants became still, were dead simultaneously. Other scorpions, in fairer fight—but attacked in the same part of the body—were killed in the bottles, by other Galeodes.

We also observed their fabulous voracity, at the same time with their feats of killing and eating each other like scorpions do. They did not achieve these deeds, however, to our knowledge, as long as they were free. But in confinement they became naturally enraged. One fine specimen which we kept lodged, rushed from its hole to attack another, as soon as such was dropped on the earth in the glass jug. When Greek meets Greek, then is the tug of war. Head to head, jaws into jaws, wrestling, rolling, throttling, pushing, lifting, throwing, bursting on each other—each of the sixteen feet, each of the eight jaws, working in rapid shifts and heavy efforts. Less than a quarter of an hour was sufficient to decide the combat in all cases which we observed. After the fight came the banquet; and I think an hour or two was all the time required for the conqueror to devour his victim completely. I am not sure whether the surviving mourner used to stifle his sobs with the jaws of the other, but he was usually obliged to begin with gnawing these by fragments off the kephalothorax, before he could kill their possessor. "Au dire de," Colonel Perjewalski, a jealous wild camel would crunch his

conquered rival's jaws—the hardest part of his skull —*after* having killed him. But I do not remember ever having seen anything left after the cannibal repast, but the long legs. One spider had thus four other full-grown spiders of the same species—of its own size!—for its dinner for four or five consecutive evenings. Its abdomen looked very big then, though smaller, perhaps, than ungeometrical people would imagine. It bulged out to the size of a pigeon's egg, while the other specimens looked, in shape, size, and colour, like the dry, narrow, pale sweet dates, most Bedawins, and the people at Khartoom especially are partial to. This development of the abdomen might, perhaps, be considered an improvement on the ordinary shape of the species, as the head-and-breast-piece appeared less prominent. On the fifth or sixth day, the one who had outdone Saturn so manifold was found dead at last.

Small, young ones were also frequently seen and felt running about, but they were, of course—agreeably to the well-known æsthetic principle—generally thought less ugly than the full-grown.

To qualify a trifle the statement that this Galeod, of fabulous gluttony and fierceness, will attack and kill almost any animal up to a lizard, sparrow, bat, and mouse—some of which animals it is said to kill merely for killing's sake—I will venture to say that a travelling locust, and perhaps even a small grasshopper, is safe with a Galeod—if it does not die from fear. A fine tree-hopper was thrown on a Galeod confined in a bottle, which seemed waiting for its dinner. They instantly flew in opposite directions, as if charged with the same electricity: the spider to the furthest point of the bottom, where he kept huddled up behind the abatis of his

legs; and the migratory locust clinging to the gauze which was tied across the crater of the bottle. The frantic fear-inspired kicking of the hopper's saw-like legs, and its being suspended like a wedge or sharpened hatchet over the spider's jaws, kept the latter in a panic, and I do not know whether he was not fatally hit. By no turning of the bottle, or shaking the animals together, could we succeed in starting a fight: it was a picture of apprehension, panic, terror, fright, and flight on both sides. As no amount of waiting advanced the case, and as this cousin of the τέττιξ looked so pitiably—she almost spoke—we let her fly. Let her jump and rejoice, and be like what Anacreon describes this love of Aurora—this "compatriot"—to be: unwearied by age, wise, song-loving, without passion, and without bloodful flesh—

τὸ δὲ γῆρας οὔ σε τείρει
σοφὲ, γηγενὴς, φίλυμνε
ἀπαθὴς, ἀναιμόσαρκε.

BOOK II.

THE MEN.

HUMAN PHENOMENA.

Soon made is the muster-roll of the outsiders, apparently friends or relatives to our camel-men, whom we got conscript, with the animals, from scattered corners of the desert.

A rider on horse would be seen once in a month or two,—armed, but not otherwise much encumbered, in good weather, even with dress. When met, he is found to be dark-bronze-complexioned, bare-headed, his rich hair most effectively arranged in the best taste, and altogether possessing the most exquisite beauty of lasting manly youth. He seems confident, whatever distances he may be traversing through the scattered bronze thorns and silvery nosegays of grass, that he will find a web for the few nightly hours—that is, either the tent of his own family or of his former guest.

Another kind of solitary rider, on a huge fast camel, glorying in its sustained speed, we meet during hot blasts, in the cold morning or searching cold wind. This rider would be muffled all over like some young patriarch, armed more fully, and provided with water and food for a few days. He may meet friends every day or two in his ride of weeks; or he may not, except on shifting Sabbaths; but whenever he can, without swerving much from his main course, he does. Fascinating is the

harmony between the full beauty of expression, form, attitude, and action of man and beast; none but a true poet could well describe the whole. It is impossible for the aroused observation not to follow the magnificent phenomenon till it is too soon lost between the billows and spray of the ground; formed by rocks broken by the efforts of the peculiar temperature into roughly rounded hillocks, and by the transparent air torn by the same efforts into rags of low mists.

A little boy and, not much further, a girl dressed according to the weather—both, doubtless, not much out of mother's or father's call—would be testing their powers in controlling some small dark cows, or a few goats among the abrupt little precipices, like large horse-boxes which fringe the quiet desert havens. As the Roman youths were, in expectation, grooming the horses in the bent row of stables facing both ends of a long "circus," sugar-tongs-like, so those children tending the animals among the recesses of this curved harbour wall, look, perhaps, already in expectation to the long, long race-courses before them, intended to return back to the haven of family. The bodily frames of these Delphines of the Desert—frames growing in the flourishing grove—wear that princely elegance which would be thought wanting in softness in children of ordinary birth and destiny; but this firmness of body is in harmony with the well-bred gravity natural to these children. And this unconscious dignity in these young ones is also in harmony with the springy youthfulness of their sires.

Two or three times during our pilgrimage we passed camps of two or three tents, with people who had exchanged heavier toil for lighter work, such as tending others, preparing, mending, growing, and learn-

ing; surrounded by saddles for men, frames of coupé-saddles for women and babes, implements and material for weaving plaids, making ropes and tent-cloth of the thickness of a rug, for protection against the piercing rays and violent storms, the thorny vegetation and the sharp and piercing rain.

These tents—I confine myself to the few I saw *en route*—suggest clearly enough the principles of more perfect ones suited to the climate. Long—perhaps twelve feet or much more—narrow, supported on four sticks of a man's height, and a fifth out of the centre, perhaps a sixth, too; with a low roof, sloping flatter windwards like a sand-hill or a tired camel with neck stretched on the ground; and without much of the accommodating walls during the day, they look like a short covered gallery, touching with its long side the tall brushwood or small trees, which form a dry sort of khus-khus-tattie, keeping off much of the heating sand blown by the wind. A loving swain would sometimes draw near, and pour far-brought cooling waters on these shrubs to gratify the sweet girl he held enthroned in his heart. He would make his mouth a "rafraichisseur" . . . . . While he stands in the sun, blowing on his bright-eyed infatuation seated under the canopy, she laughs at the collapse of his dignity as his cheeks are puffed out by the production of the artificial rain. He claims regard by boasting that he has not had one drink from the precious skin of water he is lavishing to please the girl, who sits surrounded by the aureole of a mimic rainbow of a yard's diameter, as the declining sun-rays are refracted in the volatile drops. . . . . These playful kittens are each the flower and pride of a nation—as tribes are called in this neighbourhood. That Venus-Astarte-like virgin, with a world of

play in her soul, can, it is said, be as grave and wise as a pontiff-monarch; that fellow, with his Cupid-like, impulsively inventive readiness for mischief, and in despite of his reported exploits as a man, is, I am assured, in general as retiring, quiet, and gentle as a noble Sybilline matron. I wonder, as from a distance I see them play, whether they have had, or whether they, between them, are still to have, that fierce quarrel—that incensed resentment—that burning indignation—that exile, &c., which such wonderfully matched and high-strung people seem fated to have in the course of nature, and which ends in a more binding reconciliation. What I still see, and love to see, is that they play on. . . . . From a short distance a quiet maternal remark is heard: "I say, that foolish girl will never finish those sandals." At which Spicy Sweet, as if drawn by some string, promptly ducks her head in attention, inquisitively bending, as it were, over a dear patient. "And that other idling fool," continues the voice, "had, perhaps, better look after those ghazel traps he was boasting about, lest the poor creatures, if caught, wrench their legs, or are torn to pieces by jackals." The noble youth is then hushed, too; but soon respectfully exculpates himself by stating that he is working now—keeping the leather in Spicy Sweet's hand moist and pliant.

I left off speaking of the sky and ground while discoursing on villages, and threw into the chat about wells a few remarks on men and cattle congregated. In two places only did we see anything of merchants encamping. The villages containing more permanent huts seem always inhabited with more or less people. But the hamlets, which consist of boxes of flimsy straw-matting or halm curtains—round Um-Bahdr—we found deserted in June, as is annually the case. Our colleagues

informed us that the nomads, who muster twenty to fifty thousand camels in the more populous valleys in winter, left about the end of May and beginning of June. The least perishable objects remaining were basins of a yard's width, well-rounded, and well-plastered, dug in the ground; there were also some vessels of gourd and tortoise-shell. About the more permanent villages on the hills fine large acacias were flourishing, under which we were hospitably received, accommodated for an hour's rest on some sieve-couches, and offered some violently spiced milk.

Only once had our caravan—or rather "hamleh"—the delight of meeting a shifting train of nomads. We met on a thorny tract. They must have had several hundred camels: for it took more than an hour to pass. Their camels were as huge as ours, packages few and compendious, water-skins in moderate numbers; most of the camels were ridden, and, for the most part, by the women and children. The ladies' saddles had a pair of comfortable seats yoked right and left to the hump, and had both a vaulted roof. Curtains there were none; nor were the women—of lighter bronze than the men—stupidly muffled, but naturally covered with their sand-coloured home-spun. [In questa villa mobile di tendi, trovaì quantità d' uomini e di donne domestiche, come è l' uso loro, cortesi e col viso scoperto; perche gli Arabi non hanno quei rigori di gelosie sciocche che hanno i Turchi.—*Pietro della Valle.*] The men at the flanks rode their excellent horses—dwarf-breeds, as they seemed to us camel-riders, and in comparison with their own camels. The equestrians were frisking about the more solemn camels quite joyously. I have tried some horses of a similar breed in Lower Egypt, and was astonished at the pace at which they gallop over very

deep sands, while I might safely have sat on the saddle with my legs tucked under, *à la Turque*, so quiet was the back over the ostrich-like spurts of the legs. Some Arab officers of my acquaintance I noticed sometimes unstirrup one leg and place it across the other during long rides. And some of the horse-saddles of the mounted Arabs, just mentioned, were evidently made to facilitate such a shifting of the legs. The backs of the saddles are like small chair-backs, and the foreparts are tapered to a tall upright pin. This pin is carved in imitation of the cobra held sacred by the Egyptians, and is covered with the scaly skin of a cobra or of a rhinoceros viper. Almost every man affected two foreign styles of weapons: there were the plain or thorny spears of the negro nations alongside of very bad fire-arms of past centuries. But it is the bow and arrow—not seen with them now—and the straight sword of a man's length—worn short now—which is their most becoming panoply. Of course there was greeting and conversation enough between our companions and these strangers, but not much delay. The topics were the present state of the country, vegetation, game, other nomads, caravans (of merchants), wells; then news about crops, politics, specially of Dar-Fûr. As the ornaments of the women were few, becoming, and modest, so the dress of the men was simpler than with warlike people it usually is. Only one of these men—and his home was nearer the Nile than that of these desert nomads—I saw wearing a large skull-helmet, adorned over the ears with a pair of thick bull's horns. I thought subsequently when seeing some rackingly sensational pictures of some one's "prehistoric" *genre* to delight modern serene and refined "taste." This skull-helmet resembled yet closer the picture of

a German horned Hermann in another style. [A cynical friend, in a recent exhibition, said that this blooming Teuton looked as if just turned out for advertisement from a barber's and a furrier's shop.]

How are these finest of surviving nomad races "getting on," you ask? Everybody's life is here an exciting romance of constant changes. Any one of them, on awakening before sunrise, might have invented the prayer for daily food and daily WATER; though he knows, from frequent experience, that he as well as his horse and cow can go two days at least without both food and drink. Just now he felt very important, while watching his sleeping baby in the slumbering mother's arms. And now he feels very small, considering that the last thing watched before closing his eyes is the TRAVELLING of the enduring stars: and on awakening before dawn he will be watching the same phenomenon before he can think of aught besides. He can see that that baby loves and trusts him before it can understand his speech and actions. He himself does not yet *quite* understand the Spirit agitating the stars, though he knows their features better than his own; but he cannot help loving and trusting that Spirit as a parent. . . . . He, too, has to run his orbit in humble obedience; but his orbit winds through all constellations, like the wandering yarn on a bobbin, and that for a purpose not confined to the spindle. . . . As an infant, he was surrounded by many loving eyes, as if he were among the constellations, near the Southern Cross, which move little, and that slowly. Now he runs his daily race all but alone across life's firmament, between the zenith of hope and the darkness of despondency, and his loving satellites now expect light from *him*. But he trusts he will yet emerge, a little farther up the Pole,

where in wisdom his anxious soul, refined and concentrated, will collect as perfect flower-like circles, always fully above the horizon of human miseries—as a guide and counsel to the others following. The flower shrinks within itself—contracts like an expiring flame—but its soul, the odour, rises up expansively. . . . . This soft reverie is followed after sleep by hard scheming. It is all "up-hill" work with him in these "flat" deserts: and, as in all such cases, he has to learn his business at the time that he is doing it. There is in his life not much of that enervating routine which keeps the mass of thronged people degraded into ancient slavery of modern ease and safety. He holds that constant throngs are plagues; as if he knew that the Greek name of the greatest worldly evil (*epidemic*) was made from the word for people; or that a bad man and a pestilence were alike called λοιμὸς. What is an earthquake or sweeping "black-death" when compared with that greatest of evils the Saviour of the Future warns us of—men who corrupt the soul? . . . . . The clearest desert is bad enough where—some say in hyperbole—everybody is an enemy. And the Arab knows that a few lasting attachments and occasional contact with others is all that man wants of men. After his *infancy* (remark again, the same word for children and slaves) he will rather urge and rack himself to out-scheme and out-work thirst and starvation than abandon himself, and submit to be certainly fed as a slave. Nay, he would elect to be the sable patriarch in dignified vigour, having all his people and goods under his eye and hand, rather than an ordinary, deluded, purple prince, mocked into premature dotage, and kept in enervating forms like a show-beast. What can I give for his spirits as he arrives at his tent, riding flushed, or after having lost

his beast; hobbling footsore? How can I enter into his feelings as he arrives, after alarming delays, expected like a god, though it be but like a Vulcan; as he arrives, and all eyes brighten, and arms expand, like the expanding iron sparks from the Lemnian forge; as he arrives exhausted, but causing those who love him to hasten to his arms; as he arrives, be it, lame, but enjoying the fulfilment of even his unuttered wishes, at the hands of those who move by his spirit, like the golden automaton statues of mythology.

There are some clues for the myriad details of the life of a Bedawin. As a boy he was sent to distant tribes in pursuit of accomplishments beyond those to be learnt at his father's—in exchange for boys of those distant tribes articled to his governor. In those new abodes he gradually becomes hardened, and tempered, and strengthened, and winged for independence; till he can join a tribe nearer his father's with perhaps a friend he has attracted to his heart. Then the hardened youths, in the pride of their strength and skill, join in pursuits which require combined effort and counsel; and often join in frolic, or friendly contention, admiring each other's special excellencies. After each has received this fashioning and polish, they finally harden into adamantine crystals. When each unsubdued youth's beard and moustaches are growing, and he himself gets leaner, and the hairs begin to curl as tendrils; then also his soul begins to be bored by twists from the recurrence of experience and fancy, until it sends out searching tendrils, which sooner or later find that yearning maid whose heart bursts forth in the bloom and foliage of blundering tears and compromising laughter of a sympathetic kind. Then his soul's tendrils twine tenderly around her heart, lest it burst

altogether. What would a sculptor like Hermit Joel Hart, in Florence, who could linger chiselling for twenty years on a marble poem and its plaster draughts, "continuing to note new beauties in every fresh human form he beheld;"—what would such a man, I say, have given to see that Bedawee Diana, as that youth first saw her? She, whose people were just camping at the Nile, was startled one morning when he appeared a few camel-lengths before her. Seeing her, he became a statue: she, who was a statue standing on a thick plank at the brink of the water, became animated as if by *his* escaped life and took to flight. It was easy for him, months or years afterwards, when they had become intimate, to laugh at this first meeting. It was easy then, as he teasingly asked her what became of the leather pitcher when she, terrified, snatched up the heavy plank, and, pressing it for a veil to her bosom, flew to her mother among the folds of the wall-screen—the plank giving to her the appearance of being carried away by wings. It is wonderful how his powers of action and patience now increase with the growing demands on his resources. He says that the better half of his work is done mysteriously by *her* through him. (Can you understand that?) During the whole of his stern, hardening life, he is inventor with a purpose, discoverer with an object, and life-saver in ready attendance—all this often on the diet of an anchorite, all these tasks entangled and interfering with each other in shifting combinations full of knotty details. He has to reshift in his mind the shifting stars, and that for practical ends; has to keep himself informed of the shape, extent, and changing conditions of the veins of growth on the soil, and of the veins of water and minerals under the ground; and has often to bargain with the more

familiar meteors, such as sand, rain, animals, and passing men, and be himself a fleeting meteor. At all times he will have to invent, and be the artizan of tools and contrivances. If rain fall and the last famine have left some grain, he will have to travel for, find, and till the ground. He will often have to toil for his half-weekly water by digging, if not by also searching for the wells. In turns he will be the driven discoverer and worrying miner of salts, the exploring discoverer and ferreting forester of gum tree coppices, besides attending to his wandering shepherd duties, and keeping up a look-out for migratory game, and chance opportunities for sale and accidental barter, or joining in some combined enterprise, either temporarily, stationary, or peripatetic. The threads are the more entangled as the length of the distances, mile-stoned with risks and dangers, is so exhausting. He must be at once better than egotistic Ulysses, ingenious and valiant, and as good as patient Penelope, ever weaving, ever unravelling. Sometimes all the families of a tribe pitch within sight or call of each other; but that is not the best time, and is only a necessary evil. At other times the men are not seen for months; for they make silver from their camels as carriers in trains. But even when their absence is shorter, families are often at a loss to tell where their heads may be, what they are doing or suffering. And when the joy at his return has moderated, and the patriarch is at home, such a meeting is not always what most people would call a feast. Listen to him:—

"I am rather better now since I was starved off smoking. And after a week or two of seasoning ailments which I *almost* succeeded in keeping secret from your prying inquisitiveness, my lady fair, I got pretty well used to the cakes baked from grit of tree roots; specially

since you, with your usual readiness to relieve, mixed them with the plums of locust* which you women captured. I may tell you now, what you suspected all along, as usual with my secrets, that the worst time was during a weak hour when I felt gliding into that stage of famine when we pause before attempting barbarous food; as if increasing hunger were likely to become compensated by the satiety of life; or as if we took a morbid delight in consuming the finest food: that is ourselves. Death is rather pleasant to well trained people when once resigned. I am told that the barbarians, in their deadly chill and cold climates, feel as though gently falling asleep while they are being frozen to death. Those remarks with which I intended to comfort you between what we all thought my last two prayers—after I lost all that blood, you know—were quite natural to me. You know I like, in my vanity, to make people smile at least even at my own expense if I cannot make them happy. And I was rather pleased when, shrinking within myself, I lost at last even the desire for food. One carnal desire less is one exaltation more for the devoted. In my resignation I felt as if courted by angels. But it was a temptation: I was all wrong. I had no right yet to feel *so* happy: and I became aware of this when you came to tempt me with better. You need not have looked at me with that look . . . . And then I roused myself, and, well shaken by a ride, fell to whatever it was with a will to digest it. . . . . I did not succeed at once but at last I overcame all maudlin illness. And now that we have substituted even some brown salt for the seasoning ashes, I find these root and branch loaves

* Corresponding to smoked fish, shrimps, and other delicacies of maritime proletarians.

simply delicious. It is astonishing how much better one can sometimes enjoy, by slow eating, an inferior morsel, than plenteous elaborate fare hastily devoured; and truly miraculous, and providential, it is how our appetites hush, though healthy, with the dwindling of our means. There is a story of a shorn lamb. But it grieves me, my dear girl, that you have been short of coffee during this time. We could not even try tea, which that boy says, from what he saw among his own people, is cheaper than coffee, and almost as good. I hope, if we should get any, it will be better than those experiments on roasted date-stones. And we must shift from these scorpion- and snake-free quarters; because the goats' and even the inferior cows' kindness to the children is drying up now that the shrivelled dates are shrunk within their pebbles, and not to be had for love or feathers in the scattered clan. And, my dear girl, I am sorry to command you, or to quarrel with you, but it is no use depriving your personal larder of either those little dry ghazel straps or the last gum-tears, now that the oily butter is finished: you might have seen those gum-tears you placed in my scrip brought back again—they only made it heavier, you little goose. You know I can swallow food as hard as pebbles, like an ostrich, because I am tearing about like a sporting lord; while you are only moving about the premises like a dear chaste little tortoise, or riding the burden-pace of a camel . . . . Well, old girl, these are hard times for you; but yet harder for others less provident and wise than you have been. Fortunately times are getting so bad that we cannot but hope—Inshallah—for better. And then, you know, it never rains but in vanishing puffs, or in deluges changing the face of the desert: and then crops of grain, and gum, and

pastures, and game, and water, and commerce, crowd on us together. The difficulty is in accumulating provisions when there are any. But, after all, morbid worrying is impious: the Lord continues to provide for all except fools and rascals: dost hear, thou young reprobate? Boy, there is something for thee to do about the horse-saddle: the honey is thine. Do not choke thyself with it or with the twigs. To-morrow I am yours, Madam, while preparing to capture a pair of giraffes; and if I succeed, then, after arranging those other affairs, we will all set out to sell the neck-stretching beasts of inquisitiveness to the foreign agent. I am on the track. I think capturing beasts was always my special line. What say you, my sweet Mother? . . . . Considering my descent and the experience I have had: and, above all, my nature, I ought to be a guide. By the way, Mother dear, I *have* heard of father flourishing at the head of a caravan though the youngest of the guides . . . . What about that infamous slave-dealing cousin of ours? . . . . It seems there must be black camels even in such families as ours—as if the fellow had no better pedigree than a jackal or a vulture. In despite of the glorious history of his ancestors, he went the usual way of the amphibious fool and knave. He was not an accidental abortion, but spoilt as a child; his mother, being just a *little* too showy and playful in fondness, his father just a little too careless and severe by confused turns. He was so under-bred that even when father (God bless him!) once called on them, he spoke with exulting disrespect to his mother. Fancy! And she . . . rather enjoyed being treated as an equal. Accordingly there was no holding him in the first time he went to town. Instead of improving his knowledge of duty by attaching himself to his relatives, the judge

and the priest, and their friends, he preferred the covetous and insatiable company of revellers and debauchees, cheats and slanderers. In despite of his superior instruction, he afterwards became the ignoble chief of that low-born band of cowardly plunderers, belonging to that lost tribe whose people die long before they are even eighty. Our reckless uncle then went on till, frightened to swooning in a murderous attack which he instigated—I cannot call it "led"—he left with a chosen few *that* line; and became chief in that scandalous trade which thrives by capturing unwarlike negro girls and boys one by one, and conveying them by night stages to distant slave markets. As he becomes wealthier, it is easy to see that justice is stretching out her hand for the last disgraceful clutch . . . . ."

There would be no traversing these deserts, with paths like their few capricious rivers—without having guides bred among these outposts, and without occasional friendly counsel from those met in the waste, forming loose chains of casual information. This information, along with occasional votive and guiding rags on trees in the plains, and small stone pillars on hills, are welcome supplements to the guides' stock of knowledge.

I heard nobody complain during my stay about letters or other packets being lost or mis-sent. Among the days of general excitement to all in camp were of course the mail days.*

The fact that we were once, in time, informed of the presence of haunting marauders, shows that the people in general were order-loving. Near the temporarily

* Dec. 25 at Dongola, Jan. 27 nowhere in particular, Feb. 12 in Khartoom, April 1, 3, May 14 (postilion with a guide), May 26, June 8, 23, July 7.

deserted Um-Bahdr hamlets one or two of our camels were stolen; but they were recovered after a short hunt, because the thief had no allies, and we met with help as people supposed to be respecters of order. In the first stages of our march inland, a panic spread among the objectionable of our Bedawins from the sanguinary reports afloat about the now harmless negroes of Dar-Foor. Consequently, on the night of the 25th of January, twenty-eight camels were driven off by their owners. But within two days nearly that number of camels were procured from the sporadic people lurking harmlessly in chinks of the neighbourhood, some days' distance of the Hamadeeyeh Wells. The owners of the fresh camels, more trustworthy and better informed, did not object to follow us wherever a show of dry grass would continue. Before this, on January 7, from reasons unascertained, two men deserted with six camels: the camels were afterwards found. Such fooleries—which are almost as bad as stabbing the water skins of a desert camp at night, but which cannot but result in harm to the perpetrators—if suffered to become epidemic, might put a party in mid-wastes to sore plights. . . . .

I often wondered that the camel-postilions, either from Foor or the Nile, never missed us in these trackless places: trackless, I say, because, with much of our work, we did not follow the caravan routes. Besides, we often had our own ideas—I wish they had been better sometimes—about places for encampment, enough to puzzle those used to the habits of ordinary caravans. Let it suffice to say that we were found, whether in caravan, camp, work, or under a solitary little bivouac tent at lounging lunch, at places ever so unfrequented even for the desert.

The Bedawees circulating over these ruffled deserts

like the air streaming to, and returning from, the heart of the continent, always knew of our coming long before we saw them. Sometimes a young woman would anxiously meet the caravan and ask the most harmless looking of us jinns about the lairs of the retreating waters which we were supposed to hunt especially. At others, medical advice would be sought in our camp from professional or amateur.

The Bedawins' accurate knowledge of places without landmarks, except such as can be detected by special connoisseurs, and their blindfold chess-speculation of what there may be at any time passing, were certainly not possessed by our Egyptian soldiers. Nor were our servants—Nubian, Copt, Abyssinian, or Negro—better "mediums." This knowledge, which supplements vision, may either be truly called a second sight or emphatically a theory. But, to be just, their clever masters were in this respect not a whit better than the servants—except, perhaps, our hunting doctor, and he only in a Bedawee-babyish way. Some sensational amateur carpenters of badly packed travelling diaries would make a good deal out of the fainting soldier I once found with an empty drinking-boot, but without the faintest notion of the direction of the near but masked camp. Another soldier was lost a whole day. Then he laid down and resigned himself to die; but our Bedawins did not let him do so. The two irregular Bashi Bazooks who were picked up somewhere in Dar-Foor,—and who seemed to get on during their own desert rambles by aid of the providence granted to idiots given to strong drink,—these did not certainly save the lost friend whom they had accompanied. We were in camp, caravan and all, by four or five in the afternoon, and that gentleman did not appear. Roam-

ing emissaries were sent out, signals were given throughout the night by firing of arms and burning of grass and trees. The rockets I had remembered before we left Cairo were sent up. Demoniacally clever and imperishable as we genii are made by being shot out ex tempore on any supposed place in this planet, we are in many points surprisingly ignorant. Lime-lights, for night signals, we had provided none; heliographs, for day signs, neither: though both are as necessary in extensive campaigns as sanitary and military preparations. Consequently, in the morning we relied on smoke pillars—good only in calms and *clear* air (which the desert usually hath not)—followed by more detonations, and more parties in search of the lost one, "dead or alive." Nothing reached the poor fellow and his useless companions. Exhausted from fatigue, anxiety, and want, about nine or ten at night, he laid himself down on the sandy rock and slept. When morning came, still fasting and athirst, he coolly reasoned, and worked himself at last into the fresh caravan track. He arrived some time before noon, through the hot country, which was undulated by high heaps and low hills, with thick thorns and much foliage. The camp, of course, he found half deserted and half despairing. Our servants, some of whom usually had to hunt us up while we were working, or travelling in small isolated parties, missed us several times when bringing the needed lunch. In a country thick with trees, hillocks, and game, two of these youths, after being lost for four hours, came into camp late at night: and one of them was wounded from his own pistol, as he fired at some giraffes. Whenever a good shot went out of camp to fetch game, and he was not back at dark, signals were always made; but these are not visible

far, even in the least undulated parts of the deserts—as I will more fully explain when speaking on Camp Life. One night the case was made worse, in a thicket, by the sudden fall of a sustained dark desert shower. It took these brave Bedawins some two hours of diving in the violent waters before they found our friend: and their lively joy at the recovery was quite touching. Being one day persuaded, after setting out in a small party which left the caravan behind, that I was in the way of everybody's hunting operations, I went on alone in what I supposed would be the caravan's route. But after having been out of everybody's way, I found myself soon out of my own to boot. After an hour of conjectural riding I was found by an anxious Bedawee friend; but neither of us knew which way the caravan track was being made—nor did the camel. The Bedawee, however, was more determined than myself. As I noted during two hours the sharp angles and determined distances of his tactics, I found that he succeeded in finding the fresh track on the same principles which are explained and illustrated in that well-descended genius's—Captain Galton's—admirable little book on "The Art of Travel." The same method was followed by the guides when once or twice the *élite* of the caravan were cut off from the main body. We suffered much straying in these plains of wandering without always caring to speak of it when safe again.

The bells, the little sweet bells at Khartoom, I must mention again. Who would have thought they would soon ring the knell of two friends,—young, hale, strong, able and joyous,—which we saw there together, and saw both for the last time. Poor Lucas! Both his assistant, a gardener by profession, and himself, whom we had met before, in Cairo, looked the embodi-

ments of strength and health. From the particulars related of L. A. Lucas in Sir Rutherford Alcock's "Presidential Address to the Royal Geographical Society," in 1877, I gather that our friend had passed through a course of illnesses previous to reaching Khartoom. But his appearance in Cairo, and especially at Khartoom, was that of a jovial giant, sound as a nut. Sir Rutherford holds, with General Gordon and most of Lucas's friends, that his constitution was frail, and that this was the chief reason of his succumbing in Africa. But whose constitution is invulnerable? And whose is that ideal health which would have withstood such treatment as Lucas's received? Before he started from Khartoom, he had spent a thousand pounds on instruments, weapons, vehicles, and such like: he provided for everything, except for his personal wants. The same dress—cloth hat and all—which was good in the coupé at Charing Cross was good for him at Khartoom: and in time, if his native porters have to go naked and bareheaded, why should not he? If he appreciates a good dinner at Nicol's and the Richmond Garter, and a tolerable one at Khartoom, he hopes to enjoy tree-leaves and insects where there are no markets or hawkers: why should he burden himself with tins and bottles? Of "civilization" he often spoke with a bitterness worthy a Timon . . . . Only the Athenian wanted to die; but Lucas adopted the same means to promote life which the Athenian did to excite death. The raw food and the stagnant air over steaming soil would, I fancy, have surely killed Timon,* even if he had had no greater grief than most of us have had since Adam was doomed. And what difference is there between a man's sleeping

* I refer to the Timon as varied by Shakespeare.

in a fresh-dug grave and two men's sleeping in a sepulchral pyramid, that is, in a close tent tapering from six feet square over raw ground. His flourishing fellow-giant—who might have had his familiar complaints, as badly as you or I have—died, under the same diet, some weeks before him. While we stopped near Khartoom, he was chiefly engaged in organizing his staff of soldiers and porters. He secured the most showy of all uniforms, and of all military grades—joking perhaps about this diversity not being uniform after all. He once told us, with amusement, how he was put in prison for drilling his own soldiers, the vice-governor not then knowing of his ruler's grant. Eager as he was in the pursuit of science, he was ready at any moment for play. And so ready was he to fall in with a friend's stronger humours that I firmly believe, had I suggested in Cairo a midnight trip in his merry company to the great pyramid, on foot or on ostrich back, he would, for good fellowship, have acted as if the suggestion had been his own—unless he could have suggested something which I should have liked still better. And had I been an invalid and yearning in Assouan for a cuneiform grammar, he would—like some noble English daughter or wife—in a mysteriously short time have procured me one, even if he had to compile it himself! O, for such an antidote to melancholy in a wilderness of brick, confining men as little elastic as bricks themselves, and crushed, like dry, jammed figs, into four or five slavish habits!—How delighted he was when I ferreted out for him a mine of some botanical gems! How he teazed us sometimes about what he called our Sybaritical habits: which reminded me of a passage I thought amusing in Captain Galton's before-mentioned book—

I mean that passage where this authority hyperbolically dismisses camel-travelling through deserts as effeminate "civilization." No doubt it is more sensational to ride through the full-uddered temperate countries along the Equator on full-uddered cows, or through the thickly-grown and thickly-populated tracts on well-fattened elephants. Lucas made a sketch of one of our camps while we were yet asleep, and took a photograph of another. He confessed himself greatly amused with our social and much instructed by our professional life. His great eagerness for knowledge was checked by death: may his soul enjoy that fuller knowledge of which the most favoured of us here can only guess "in part!"

ARRIVALS INTO CAMP.

CONSIDERING how rarely the gift of organisation is found among men in the greatest positions; considering that absolute power without that ever self-perfecting gift breeds often greater disasters than all the demons of adverse nature; and strongly suspecting specially that all the lamentable distresses and failures of desert expeditions, ancient and recent, attributed to the stars and the soil and what not, are *chiefly* due to man—to the misleader's mismanagement—I felt thankful that our parties were constituted on English principles.

Every member of the two leading staffs of four each was evidently commissioned with the knowledge of his competency to push on and carry out the whole work any moment at the head of a commuted, maimed, or halved staff; or even if he were left sole agent. Indeed, this elastic vitality did on several occasions come into requisition. It was foreseen that investigations of rival routes will necessitate the splitting of each staff. Accidents on ground, in progress, or in health, would again, and further, result in charging one man with the task of a whole staff. In fact, the staff was so articulated and provided that every engineer with his own train could detach himself any day and proceed with any degree of responsibility. Besides that the officers of the army were necessary elements of the expedition in a

general sense, so also for cases of emergency they were kept in engineering training to act as effective reserves. Yet, whether in large or small parties, everybody was taxed to the full extent of his powers. Each of the two men in charge of the two parties never seemed to wield more power than that of president of the council. On the other hand, all members of the council were bound, and did keep in strict obedience, like true Britons, to the decisions of the council and to the administrative power of the president. The very liberty and enhanced interest they had would have made them in some critical phase of presidential mismanagement less mutinous and more resigned than if they had been treated with any premeditated imperiousness.

The camp was generally shifted every day, and usually presented some fresh traits, like the life of our attached friends, some fresh occurrences with changing moods. But besides the diversity in the mere aspect of the encampments, there were gradual and periodical changes in our camp life, dependent on the shifting order of our operations.

Let us take shelter in these tents on some day in the hottest part of the year, say the end of April and beginning of May. But let us first deserve that shelter, such as it may be.

Type of Arrival the First.

It is somewhere about noon-tide. In the centre of your horizon, more or less confined, in mid-plain, or along the foot of hills or plateaux, more or less bare, you see the party sharply defined in a loose string. There are perhaps two dozen people and five or six camels.

We have been six hours at work since we left camp; it is several hours since that camp, in the shape of the caravan, had passed us; and we know it will take us a couple of hours more to reach the new camp. After the eager rush in the fresh morning air, we enjoy for some time the gentle pinching of the young heat. Then we push on harder as the heat increases, thus suffering less from it. We have to be very prompt to snatch our proper observations and their checkings in the short calm moments between the winds which shake our instruments, and in the clear intervals between the oscillations of the mirage. For six hours, then, we have enjoyed this eager work which is so much like sport. But then some obstacle occurs, and the compulsory slowness caused by it disturbs our hitherto serene minds into fidgetiness, and into taking notice of the weather and such things, as affecting the animal system. At last the obstacles are cleared, and we "put on a spurt" as if running from a lesson or a prison. In due time the white sails of the camp appear. Another forty minutes elapse. . . . . Now shut up steam. Why the —— don't you keep it ready for me? Can't you see that I have done, and you may go: go to camp, I say. . . . . I bend down with the usual precaution—head erect, if you please—to adjust something: and I find that I feel giddy and trembling. . . . . There is a good camel: the rise into the cooler air, and a short, fanning ride—if not quite close to the camp—is somewhat refreshing. Well, Effendi, I hope you have had enough of the chain for to-day. What! do you think you will be able towards evening to run over that supplement? . . . . Well, you will see how you are.

We arrive one by one from different parts, silent, solitary. . . . . O, *misericorde!* How often will she

turn round about on this little spot among the tents and boxes before dropping me! Hi, Napoleon!—I mean Mohammed—or anybody! Where is everybody snoring that none come to bring this camel down? Take a hatchet and cut off her legs! . . . . Ah, the lunch-table is laid in the big tent. . . . . A biscuit and some drink . . . . More water with raspberry flavour . . . . That will do. . . . . Here is a full tumbler ready for you, old fellow. . . . . Are you ill? . . . . What a noise X. makes in his tent with that pint of water in his tub! I say, X., can you swim? Is Y. in yet? . . . . Don't ask me, please, about figures and estimates just for another five minutes: I will be ready then again. Look sharp about that lunch, Petro and the rest. . . . . Hi! Ibrahim, a fresh cake of soap. . . . . Now, my dear fellow, here is your fall on the last three miles: look. And here is the soup to fall to. . . . .

Type of Arrival the Second.

It is long past two o'clock. The radiation from the heat-saturated ground through the now calm air is at its worst. The vehement rays are cleaving the rocks, undeflected by wind, and unmitigated by vapour or foliage. The two best "animals" of the staff, unwilling to stop several hours' journey from the new camp, race on with their work grimly. They work with reserved force now, and for a very plausible reason: each mile of this counts two, considering circumstances. They manage to economise even breath, except now and then to cheer up their followers who grow unsteady. . . . At last the rest of the staff shows flight. The better favoured "animals" with one will, as they keep close to-

gether, send two scowls after them and continue like bull-dogs. But as the excellent willing subalterns grow more unsteady, stupid, and slow, the leading "animals" condescend reluctantly to give preliminary instructions for breaking off. . . . . As they start, say towards three o'clock, and the plucky young Effendi mounts his camel, his face is seen deep purple and his eyeballs pink. Soldiers, guides, and camel-men make ambulant sentry-boxes of their cloaks or plaids; and this harder half of the party, on foot and on camels, march in a body along what is hoped to be well-wards, through the interesting phenomenon of woods. The fresher of the men laugh at their more exhausted brethren in toil—who look very comical—as they ease them of their heavier rigs: which reminds me of a serious passage in Sir W. Napier's worthy description of his heroic brother's most memorable desert march. The camels, whom amateur tourists would call hard, stiff, jolting, and what not, carry the riders over sand and rock, as soothingly as an affectionate and intelligent nurse would remove an invalid infant. The exalted Effendi, and the other exalted gentlemen, are chatting between short pauses as if sitting after breakfast in some lofty cool palace: they make observations on the features of the tract, and exclude instinctively all "eschatological or teleological" speculations about the *end* of their labours.

At last, after an hour's ride or more, the party burst from among the thicket and boulders into the open taken up by the fresh camp. Where are those wells? The general direction satisfies everybody: they are the usual holes. Ah, how readily some wealthy yearner after easy fame could be made happy in these deserts. Line some of these wells, my boy, and build magnificent marble *gloriettes* over some of them in some

worthy style! . . . . Thanks, Girgis. How readily, yet how gently this camel has been treating me, even during mounts and dismounts.

Type of Arrival the Third.

The party which had started work from Dongola and Khartoom, and the party having worked from Tendelty, having achieved their task, are joined in precipitate retreat riverwards. Poison winds and irritating, if not sickening, rains pursue us. And just when we have most need of acceleration, the perversity of nature and man combines to keep us back and drag us down as if in a nightmare dream. In the worst situations, on clayey, slippery muds, the camels are attacked in their weakest point. As, in ambling, the advancing feet touch the ground—by reason of their pestle form—they glide forward, like skates on ice; while the other pair of feet—by reason of the great projections of the false heels—cleave fast, like children's "suckers" to a slab. With every stride they risk limb or life; and the most we can do for our trembling and disconcerted supports is to dismount and conduct them along the better ground. In the intervals of showers the thirst is fiercer than ever; and it is at this time that the water of the wells before us dries up, retreating, as it were, like mirage. We travel hard seven days without advancing even one step; because we must go east, instead of north, where the wells are reported dry. It is during such periods that people are most likely to travel at the wrong times of day and night, sometimes over-stretching their journeys and then making them too short at the wrong times.

We travel through the nights, in a season when it is

not advisable and customary to travel here at all, when the nights are the hottest of the year, and the "poison-wind" makes gloomy even such nights as would show some moon. During the darkest period of the nights the caravan is broken up, as perversity of fate will have it, by break-neck labyrinths of precipices. When single riders, small batches, or even large groups come across each other, they do not usually feel relieved, as each man is irritated against all the rest for not being better informed of his whereabouts than himself.

How could they be so, considering they do not know where or what they are themselves!—Whether, for instance, they form a fragment of a straggling rear, or offshoot diverging into perdition, or the dangerously forward van, or the very nucleus of the reconstituting caravan! When at last, some time after day-break, the men in a large body would begin to feel like a caravan then many of the wearied errantry would think it long past time for encamping. But the majority seem as though goaded on by an instinct which shrinks from an unreasonably hot camp, till they are sufficiently fatigued to dare even the evil of heat-entrapping tents. Nay, a few fortunately constituted ones gravely enjoy their hitherto reserved power of resistance to fatigue, and take a quiet pleasure in the play of the caravan. We continue on without rest, during the fierce day, among stuffy channels and kettles, where, instead of being soothed by cooling foliage, we are attacked by tearing and radiating dry thorns. On, on; we must not yet stop till we are quite sure that we have had the worst of the late afternoon heat. Of course men fall sick, and camels drop dead, sometimes six of them in a single march. And when the brutes drop while cut off in the dark, sometimes their loads also get lost, containing precious

instruments or indispensable provisions. During the six weeks of that retreat there dropped about seventy out of those two hundred camels who had previously suffered from "scarcity of pasture" in the interior of more inhabited Dar-Foor, the limit of the camel's geographical range. The loads increasing on the remaining camels did not help us on. The parts into which we had deviated, were known to the guides only by bad repute, to us as void of tracks, and to map-makers as an easy blank. We are also affected by the alarmed news from our scouts, and by startling chance news. Far from being able to give our servants instructions *when* to stop for camp, we on the contrary are startled at midnight after a couple of hours' sleep by a sudden alarm, and it is our servants who tell us to be up and off. We shall be stopped, I suspect, when everybody will be wanting to go on.

In this period of confused wandering it was perhaps a consolation to be at times half torpid, half wandering in mind—as if when studying intemperately for some examination. Sometimes one would be aroused by the danger of losing sight or track of the caravan. One night, after midnight tea in a small party on the sand, and after the caravan had passed far away, we lost our way by being caught in a very thick sand storm. Many would, at different times of the night or day, drop off the caravan and take some of the rest for which they are dying. Lying in a hot sun is very risky, even for Arabs, and more so for Europeans. Sometimes on arriving we would fall into a lethargy the moment we were down from the camel—even before bed was available or tent pitched. Again we would find on some pleasant spot the commencement of an encampment, and would be roused, after an hour's morbid sleep,

not for a meal, but to get away, as the tents have to be taken to the "real" camp two hours' ride somewhere *backwards* over Alpine rocks into a mephitic hole. During another day-and-night journey two or three of us would agree to let the caravan proceed, and to stop for a roadside tea some time before or after midnight; then to sleep on the sand for three or four hours. Once, after such an occasion, I rose to have a long fast trot (by myself) during the fourteenth, fifteenth, and sixteenth hours of the journey. I caught up several small parties of soldiers, riding, or sleeping, and arrived under canvas, in the heat, about eight in the morning. But I did not care for sleep. I felt as one does sometimes in very wild country revelries, lasting for a week or more: wide awake and ready to be lively; as if the system had roused itself, in wild resentment, to defy that protracted and chronic fatigue.

Sleep, snatched and broken during the days which were after all hotter than the heated nights, was a bad compensation for the fatigues which are greater at night. The authority of Colonel Potto I have adduced in the account on the climate of August. But we did worse than merely have successions of night marches: we had both day and night marches combined, as if not enough beset by other evils, with which we had to skirmish or had to bear. One kind after another of our necessary stores became spent. And it is the usual weakness of men to act foolishly when bewildered. Bad as the whole affair of this six weeks' retreat was, it was checked, for occasional respite, by some nerve or other now and then: that was the most which even our fine organization could afford. Without this, men and camels would have been a complete wreck, with perhaps one surviving Bedawee to tell the story. The time spent

over part of the work had been very much in excess of what it might have been: possibly, because Dar-Foor was not found such as it was quite recently reported to be; and especially as Tendelty was found several days' journeys farther west than is shown in the best of recent maps. While waiting and preparing in Cairo, I had asked in good time, but could not get from the booksellers, the latest map and précis of Dr. Nachtigall—though I had offered to pay its weight in gold for this questionable help.

Type of Arrival the Fourth.

And let me thank my stars that this abstract at least is intended to be fairly typical of what we enjoyed for far the largest, and that an unbroken, period of our desert experience. It was quite "tame," and is perhaps even silly to relate.

The silent, wise nights, with the silent watches of the stars going their rounds, were "obeyed," as my Homer says. But there was no delay after the prompt rise of the punctual sun. I make it a stern duty of my "Lord Chamberlain," making it still less exorable by the stipulation of extra rewards, to deal with me as despotically as if I were his least worthy slave, as long as I keep shirking from Getting Up. Thanks to our auxiliaries—the first detachment of soldiers instructed to threaten demolishing our tent over our not yet anointed head—and the savage war-cries seething all around, strong enough to make a champagne-cork of the heaviest colossus of a sleeper, we push, bud, and blossom forth in our self-appointed season somehow:—only don't ask me how. And whether we did our day's journey,

or our daily work, we reached camp, not very often after sunset, but usually a little before. We broke our progress by having an hour and a half for lunch, under a solitary bivouac tent. Arriving at camp, we feel very hot, perhaps very tired, very thirsty, and certainly very hungry. Sometimes one, then another of the voices of this quartet would predominate, but none too strongly or too long. The great charm, however, is due to the lovely order and harmony in the work: everyone knows in good time what he is about—even the least of the camp-followers. The daily distances overcome and the remainder to surmount, are supreme in our minds as we start, or as we arrive. We often try the limits of our strength and skill, and usually compare with the work of one day the achievements of the previous ones, done by us or by others here or on other continents. But, tempted as we are, and goaded by what is before us, we pull in before abandoning ourselves to that intoxication of overwork which is certain to result in loss of time and worse.

We arrive at the camp, the position of which we had prescribed, in the morning, or at lunch time, with the sternness of destiny. If I say "we," our council of four must be understood to have been supplemented with the advice of the guides in some cases. We may be later than the estimated time, but not often by more than an hour. We feel sociable, arrive in pairs, are very grateful for the easy chairs round some box outside the tents in the lengthening shade and cooling air, where we help one another to hot tea. We appreciate it so keenly that we call the major domo, always in office, who serves it, the messenger of the flowery kingdom, or some such names. My jewel of a Nubian sees perhaps his effeminate master shudder

from a sudden chill in the quiet and shade, and comes to comfort him with a wrapper accordingly. Poor monkey, he must be very tired from the heat and ride, as he does not care for tea, and is just falling asleep on the top of the highest tent. This shows that there is no wind likely to blow at night, else the fellow would sleep under shelter.

CAMP LIFE IN PARTICULAR.

Aspect and Sounds of the Camp.

Even where the country would appear most flat and bare, the commonly disregarded and unappreciated undulations of the rocky surfaces are just high enough, and the vibrations of the heated sandy air just opaque enough, to conceal and veil the camp at a distance of a mile or two. At less than such a range, the tents seen in one aggregate appear as pointed billows. From a neighbouring height the whole camp looks like an Egyptian bib-shaped coral-reef. The details are also, I fancy, in keeping with the marine physiognomy of the desert vegetation. Coming into camp, and diving from our animated gondola to the bottom of this mock sea, we notice among the hard and thick-shelled packages—first in order of time of its erection, and as centre of gravity—the kitchen tent, in form of a low star-fish. The thin-necked camels, on their tall thready legs, and the raised tents with their caps and ropes, are like as many medusæ. The tents, though they keep the ground with their pointed harpoons, still often prove stumbling-blocks to the eye and limb-tired drivers. Sand too loose, or stones baked into conglomerates too hard, do not afford hold enough to the tent-pegs, and where the ground is of such a nature, the

heavy packages must be placed around the medusæ, clustering like some parasitic anthoid molluscs.

The well-bent crescent-shape into which the constellations of camp fires, kitchen fires, lanterns on sticks, and garden candles, are placed, is often conspicuous at night, two guards appearing at the horn points, with lights reflected on their rifles. Characteristic within the whole camp-crescent are also those small crescents —like sea cucumbers—built up of pack-saddles. These serve for bivouacs to small parties of the Bedawins. Usually one or another of these is well lit up by a small fire.

The convex side of the encampment, turned against the ruling wind, is marked by the gentlemen's tents, the centre of the concave by the much smoking kitchen, the wings with the common soldiers' and the servants' tents. (The Bedawins pile up their small bivouacs anywhere—when they want any.) Thus we obey nature in folding ourselves up like those sandbanks which I have called "slippers." They may serve as an emblem of our domestic rest, if not of a *régime du pantoufle* at the same time.

The camels are scattered wide around the camp in all positions of movement and repose, with a few Bedawins among them, and others roaming beyond them. These elastic bronzes may in the distance wash in the sand and rub themselves with pebbles instead of soap: this may be a rite, it is certainly conducive to health, and is specially a corrective of rheumatism so common amongst them. When the wind is high, and the smell of the camels strong, there are more Bedawins among the camels; and men and beasts keep from windwards of the camp. Though there are many of the animals grazing, or perhaps cracking branches and thorns, a

good number are squatting to ruminate quietly and with a happy expression of countenance. As they thus squat, repose is well expressed even by the hump—what there may be left of it—being thrown, like a shifted burden, backwards, and at the same time being lowered along with the thin end of the abdomen, which is much higher than the breast, while the animal is standing. The shoulders of these squatters look like big eggs stuck in the sand, or like a bishop's mitre on a pillow. From behind, the squatters look like pears, with the head for a small leaf. The curves in bedroom curtains often make me think of the reposing camel's rear view, especially curtains which show the fastenings at the sides and a festoon-point in the vallance. Very tired camels sit with their long necks stretched along the ground, at least the anterior half of it, while the upper portion bends up to the shoulder, along the curve of an inviting Balzac couch. They are not unlike snails, or humped bivalves with their creeping necks. The front view also of their chest and shoulders is like a heart-shaped Venus-shell, imitated in Greek scrolls, and containing that pearl of a water-stomach. Others of the very tired ones sleep lying on their sides, with fore-legs contracted like a sleeping man's arm, and hind-legs stretched out. Their bellies appear like lateral humps, and their breasts exhibit that heart-shaped pad on the breast hump (reminding one of the ostrich's breast-shell) on which so much of the beast's weight is supported when it is squatting.

There, in the camp crescent, is one of the Egyptian military tents, described in the sanitary notes. In it are the two Arab officers. They give orders to, or are served by, one or other of the subordinate warriors. One of these gentlemen had his arduous share in field

work, the other had charge of the caravan, and is the architect of the camp. He may be caught sometimes directing the doors, or, alas, slits only, of the rising tents to be turned some particular way by help of the compass which had guided him and his caravan. The secret of the prompt and regular growth of these dry mushrooms lies in the fact that this noble fellow is not afraid of taking hold of a pole, rope, peg, or mallet. There were, in most cases, only four or five soldiers left for all this pioneering; and refractory grounds and impetuous winds were frequent. The main points in the officers' and subalterns' camp duties are the maintenance of public order and safety in detail; the distribution of, and watch over, the water, being the most important.

The soldiers are busy here and there hunting for fuel and raking out victuals. At nightfall they are careful to be in camp, and the Bedawins also gather within narrower circles, so as not to be isolated in the desert. Nothing is more common in these places after dark than not to find the camp from such a small distance as a couple of miles, even where there is not much undulation in the plains. The lower air seems broken into mirages, even by moonshine. Higher landmarks, raising their shades into the air, or reflecting some of the natural lights or artificial fires, are scarce. But even fires do not shine far, though they have the dimensions of conflagrations. We often saw that acres of burning grass and piled up shrubs and trees were seen by the belated only when they were safe, having caught sight of the camels or Bedawins or tents. Neither did the sounds of guns go further than the lights. It seems as if sound and light were here broken and cut up by the cracking dryness of the air, as the casual foliage of the thorn trees

is frittered away, and as the very rocks are bruised into stones and dust, which again seem made to split and absorb light and sound also—just as is the case with thick soft carpets, heavy tapestry, padded doors, and fringed velvet curtains.

The servants, two of whom had to find and attend us abroad at lunch time, are wanted to put forth their best efforts in camp. At night, the Coptic cook's face—lit by the coals in the grate-trough, which serves as range—looks like the golden portrait mask on a mummy-case, the lineaments of which I well remember. He may be the lineal descendant of that mummy, who may have been a king, general, engineer, or some other member of the superior priesthood. My funny old valet, chief of the camp servants, continues exploding his sharp magical barkings of command all round, not only to the menials of lesser pay and brains, but to some of the obliging camel men, prompt soldiers, and, I fancy, even to the good-natured sergeants. I have collected, in the course of our practice, for my own use, nine Arabic expressions of urgency, and there is hardly one of these which can be called a stranger to the dread yet popular major-domo.

This noise, with whatever there may be besides among the other servants, the escort, and the camels, about meal times—too much as it is, because much of it arises from bad arrangement—this noise is yet gentle when compared to the daily chorus at the starting and stopping times of the caravan. The orchestra, startling at its first explosion, as mentioned in the introductory chapter of this volume, is always impressive. The herd behaves as if each camel's ponderous feet were the enormous drumsticks to those big hide-bells which, further south, in damper regions, serve to call whole

tribes together for council or war. The brawny Bedawins, with their slender limbs, looking like walking bagpipes made of the dark water-skins, join in shrilly. Hoarse and broken is the distracted servants' voice driven through their laryngeal tubes by the urging bellows of their lungs. Nor are the soldiers with their manly voices through the trumpets of their mouths silent for a moment; and the clear bugle voices of the two officers are unmistakable. Now and then, but rarely, one or other of the magic triangles of the leading spirits would also strike a note.

Yet, taken altogether, there are regular and long intervals of humming quiet in these camps. Often was it said and thought in these deserts:—Thank heaven, we are free from the pest of native street yells and foreign instrumental noise which has not even in England roused a John Howard yet! What can you expect of those who call themselves—though rarely—Christians on the continent, if this deadly plague is fostered among Britons, among whom even the people with lesser cares have the good breeding to subdue all unnecessary noise *indoors* . . . . All? Are not the ravings which are set roaring outside the "Englishman's castle," predominating in every room of every house which is not protected by a separate goodly park or a wilderness? Where is the root of this alarming contradiction in English character?—alarming from its tendency to disorganize the nation. Besides the absurdity in sense—which may be detailed to any length—there is the contradiction in what is supposed to be feeling. Confront the nation's world-embracing charity toward despised foreign nations, confront the hidden delicate softness of feeling even in the males of all respectable classes, confront this with the wantonness,

nay brutality, of tormenting, maddening, and murdering their own relatives, whether on the couch of sickness, or in the loneliness of solitude, or labouring among the quietest but most arduous duties for which frailer if more complicated organisms are requisite. Where is the equity in brutally treating fifty wretched bachelors or widowers in the "quiet" quarters of the Adelphi, or St. James', or even Oxford for the questionable convenience or chance whim of gutter children, or say one landlady and a few servants, how worthy soever, but dependent on these persecuted men, and protected either by being muffled underground or by circulating all about in cheerful occupations? . . . And noise, in these oppressive oily Norse airs, and amidst these bare square walls and reflecting slabs, is not even muffled, intercepted or broken, as noise is in most Eastern towns—where air, ground, horses' hoofs, and vehicles are different, and human voices are not roughened and infernalized.

Some travellers make much ado about the camel's noise; but I think they are not fair. Nature is never so bad as man in his depravity, or by corrupting some parts of her,—as I think I have not reminded people often enough. Thunderstorms are more easily borne, I am told, than curtain lectures or kindred debaucheries of voice. I do not find these excellent animals' voices disproportionate to their size; and by reason of their very depths, think them—like droning thunder, rumbling and reverberated—much less annoying than the calls of several other domesticated animals. Besides not being cutting by shrillness, they are not wearing by monotony, nor are they piercing by isolated points; but are generally huddled up in a great phonetic puff much softer than the noise of hoofs and wheels in Chris-

tian thoroughfares : and, as said already, their voices are certainly not continuous. That the calls are not even monotonous may be inferred from the fact that the Arabs have about a hundred expressions to interpret them. That it is not the *fault* of the camel if some people quarrel with its calls, may be inferred from the fact that a third part of those expressions are terms of affection. That it is not the *camel's* fault, one may see from the fact that badly treated, low-bred and neglected ones make the greatest noise. . . A little care renders a tolerably well descended camel as noiseless as required. I have seen these things done in a couple of weeks. Nor are whole breeds of silent camels unusual; and such breeds are many. The oldest Tibetan hunters of wild camels told Colonel Pryewalski that the voice of the males is never heard, and the musical females,—with the music of a master-made orchestral organ, mighty yet soft—are only heard while nursing o training.

The more responsible members of the party, after their arrival in camp, kept quiet for some time—one or another, perhaps even till the morning, if the arrival was at sunset—specially during the time of mere travelling. But if they arrived at about two in the afternoon, from field work, there was some variety of action noticeable. For the first work in the morning, the limbs in vigorous tensions were sent about their various work, as if to prey ; for lunch they were relaxed and gathered round the feeding centre ; for the intended day-rest, they were allowed the freedom of lounging about. Day doze is an amphibious state in these surroundings where man himself feels, as said before, like a cold-blooded reptile. Lasting these early afternoon hours, depressed under a low, extinguisher-like, life-

smothering tent, one's health too is amphibious. So are the remedies: flavoured water and scented fire, though perhaps inimical elements, become conciliatory by the intriguing temperature. Sometimes pluck enough is left in one to resolve on counteracting and resisting the conspiracies of mining internal, and aggressive, external heat. And then the head is raised into convulsively crawling hot air—which is all the draught the perspiring man can get under those towering tents. By this effort he will perhaps save himself headache from morbid dozing near a charcoal brazier by procuring headache from working against time.

Sanitary Notes.

The chief source of deaths, epidemics, and other maladies, is, in expeditions like this, an incapable leader: "The most dreadful of disasters is man in his conceit":—

> "Jedoch das Schrecklichste der Schrecken,
> Das ist der Mensch in seinem Wahn."

The possibility of evil is greatest in an expedition —and such are most of them—where there must be an absolute, unchecked leader. There the evil, if evil it be, is absolute. Those who appoint the leader decree to a great extent the fate of the expedition. As there is—on the field—no remedy against *this* evil, let those about to appoint leaders well and *long* consider that no amount of merely professional routine and personal energy can make a proper chief. Modify a little the beginning of 1 Cor. xiii., and substitute "aptitude for management" for "charity" . . . And then let the appointing authorities study their candidates better, and

with less forward and self-confident judgment than is usually done.

Now to the affairs in which even badly organized flying columns have some remedies at hand.

Major Prout gives something like a sanitary account in the Report of an expedition to this neighbourhood.* The statements are very summary: importing in a few words that the sanitary arrangements were good; and relating at some length the appalling condition of the health of the troops as due to the "rainy season. As details—almost feminine in their solicitude—in sanitary management are everything, we are left without instruction under this head. The sick lists, however, and the description of the complaints, as also the climate records, are detailed; and these will be found valuable additions to the material for future paradigms and analyses: especially if those wanting details of sanitary management be supplied.

The general effect of the rainy *season* on our seasoned organisms I have mentioned in my account of the climate.

None of the particular cases, serious and fatal, am I in a position to attribute to any season. One man [and that a native—a strong negro] died of cholera morbus during fair weather, many days after rain, on the march back: cause of contracting the illness unascertained. One Englishman, in the western camp, suffered repeatedly and severely from dysentery: cause attributed to the water; but it may have been the tents. Another Englishman, in the eastern party, in very fine season and weather [March 8], was prostrate from an alarming form of fever for several days: ten days including

* "The Province of Kordofan": Publication of the Egyptian General Staff, 1877.

the time of lingering weakness. The anxiety about his life was great. The cause I suspect to have been the water, or the bad air in camp, or the piercing of the sun through the tents. It was attributed to the somewhat jolting rise in the temperature—but there were other such jerks which were harmless. The same gentleman was obliged to leave India because of a lingering fever. The same gentleman—very strong and remarkably abstemious—had, at Um-Bahdr, one or two days of illness which alarmed me, but not him [as his other illness did]. He called it "nothing"; I thought it was cholera: from various symptoms every few minutes. The recovery was prompt. The reason I assign to the air on a low ground which had served as camping-ground for ages. The ground was also near pools and scattered veins of morasses in this valley of a hundred wells. The drinking water was filtered: *not distilled.* I remember, however, having at that place distributed filtered water to several men complaining of dysentery, and they afterwards reported themselves better.

On the march back, during the season of night storms, but not particularly bad weather, a third Englishman fell sick: this being the second case of cholera morbus. It was in the very crater of those mephitic wells which I mentioned elsewhere. The tents were bad, the air was bad, the water was bad; the only fresh food got was infected with red nuclei of the size of nuts. I made a good meal of it, as I was hungry, though it haunted me *afterwards*, but I walked it off, regardless of temperatures. The patient was always a model of abstemiousness and self-control. He despaired, everybody was alarmed. Then the doctor fell ill, and half the camp was ailing. We stopped there a week on this account as much as on account of our emissaries reconnoitring.

and ourselves deliberating on the course in which i would be least dangerous to deviate. The doctor kep his own counsel about the diagnosis; made a heroi effort in his own case, and finally pulled the peopl through.

Air, Heat, Tents, Soil, and Light.

My greatest authority so far is Rawlinson, the sani tary engineer, who has left a mark in history by tha noiseless generalship with which he saved all thos thousands of lives in the Crimea and other camps. In hi letters published about the Ashantee climate—or som such remarkable writings of his—he says: "There is no air in the world in any climate . . . so deadly as air loaded with the emanations from skin and lungs."

First, then, of the air in tents. Speaking of the climate—before May 13—I said what the tents should be to keep off the searching sun-beams. Since I made those notes, I have seen some sketches in the papers of exceptional British tents in tropical Asia, which seem to promise that people are beginning to think for themselves, even in the tropics. The necessity for having airy tents as a protection against heat will lead people to agitate by-and-by also for aërial cleanliness. It seems that what would keep off rain is not yet proof against these dry sun-rays. Two sheets of tarpaulined cloth, or cloth the pores of which were stopped with some thick paint, have been found too futile by Surgeon Myers (editor of a hunting diary among the sword-hunting "Hamran Arabs"), when relating the death of Lord Ranfurly. It is grievous for a physician to wish his prostrate friend rather to

walk in the fiercest desert sun than to be smothered by this dead heat. . . . .

The best and most modern model-tents which the first London makers supplied us for this climate were of the following description [never mind the "term"]. They were of one piece, top and a rudiment of "wall." I say "rudiment," because the vertical cylinder was only about two feet high. And of this only a part could be removed by a very laborious process; for the vertical part was of one piece with the towering mistake of a coffin aspiring to a point about fourteen feet high, supported by an articulated, and consequently rickety, pole. For all ventilation overhead there were four sleepy little lids like camels' eyes, without any stiff frame, and as a consequence usually collapsed. Of the infected air and stagnant heat in these life extinguishers I am likely enough to have spoken elsewhere. The desperate pitch of the roof may be useful perhaps in rainy countries; and the ricketiness of the ingenious maypole good enough where there are no winds. But it may be said that there are rains, and those with a vengeance, in these deserts. So there are; but considering they are fond of fanning their ardour with sheets of storm, the first few drops invariably amuse themselves by treating these tents, *and this kind only*, as we do our folding hats in balls to sit on them. Or else it seems as if the merry devils of sand-spouts were harlequins delighting in startling effects from a light wand. Let some female or youthful mind imagine what becomes of the men and things inside such collapsed tents. The pole with its stays sometimes remains, swaying to and fro on its hips, as if laughing at the soaking rag.

Without tarrying much about our bivouac tents, let

of the upper roof fell on that of the lower; the upper roof was only the size of the lower, and the outer flaps, short and high, were of not much use. But even thus we gained something, while feeding, working, or chatting together; or at least the invalids gained when we laid any up in that tent.

Let me send another *cri de détresse* for suffering humanity from these deserts. I mention elsewhere the dreadfully Western-European style of the "best" hotels in the East and South of the world. The majority of private residences, of whatever rank, are just as bad in and about those towns where the hotels *sicken* and emaciate the people. If Europeans in the Levant must insist, with a modern viciousness of perversity, in building palaces and other houses with thin walls and without shady arcades, let them at least build exposed houses with hollow walls, as a friend of ours does in England. If the modern world of millionaires are too poor to protect their friends with reasonably thick walls, let them modify those thin walls so far as to make them hollow. This is a fairly good protection against piercing cold storms if not against piercing heat. Do this rather than go on attributing the havoc caused by deadly ignorance to the "deadly climate." Doctors sending their invalids into the good air of these places should consider that this good air is, in the majority of the invalids' dwellings, *inflamed* like a neglected wound. Spaciousness and loftiness alone do not make a proper dwelling in the tropics.

Next in importance—whatever the "season"—is the air on the camping grounds. Aggravated as the fatal malady of Lord Ranfurly was by the tent heat, he seems to have contracted the malady from the infected air in camp where meat cut in strips was hung about on bushes, tent ropes and packages, to dry for provisions—

as is the habit of Bedawins. Offal of whatever description should be removed or buried immediately: one cannot be too prompt and too urgent about this point —in these climates especially. The first large game after a long interval was killed, and distributed and scattered in camp, the day before the alarming fever laid hold of our friend . . . .

The latest Rules and Regulations about Encampments issued by Her Majesty's War Department should be followed: lest people insist to the end of time in pitching camps at desert wells the hollows of which are graveyards and dung sinks, and concentrating reflectors at the same time. That these places are very much worse in the sun after each rain, will be found out in some future century. I was startled by horrible things, hidden to others, in the tall dry grass on the bad ground in the camp where half our people had the cholera, dysentery, and fevers. And the poor negro, too, previously mentioned sickened and died just in such an infernal camp.

The malarious air on merely damp ground—"incumbent," as a sanitary professor keeps reiterating, to injure the healthiest youths fresh from the best British classic colleges—creeps low: and that the desert is wide enough and not without rocky heaps I have said often enough. If the heights be not compact and large, I do not see why, in most cases, the tents should not be a little more scattered. But I hardly think I shall persuade people to have their own atmosphere unshared. If you let the men pitch where *they* like, you will find them picking out, from all the boundless desert, exactly the very spot where they may contend with the stinking vultures over the reeking offal from some other caravan which may have struck camp there

the same morning. Sweet charms of adhesive custom, which make fatalistic people rather sink in clump than ascend separately! I have already reported on the climate. But I cannot see that, as Burton says in his "Anatomy," the "hot distemperature" makes men melancholy. There are, as a rule, not many days of deozonizing simoom; and I think the irritable melancholy of Englishmen is hardly relieved for as many fair days in the year, as there may be, at the worst, depressing days in these hottest of deserts. The resounding lines of Dr. Armstrong's Sanitary poem show tropical air certainly frightening enough; but they would sound very small when compared with the effects from chill and cold air with no more sanitary care than there is just now in the good old countries farther south. You can extract some instructive particulars on the effect of northern air even from Dr. Guy's excellent *little* book on "Public Health."

As I mention the effect of air over the cultivated vegetation on the Nile as memorable to us amateur Bedawins, it is only fair to record the exhilarating effect from the delicious air in the tall forests near Gabrah—memorable for the singing birds also.

I heard of no eye complaints during the time we were there: neither the flying sand, nor the glare of lime-rock, nor that of the field-books without a shade of tint, provoked such complaints. Even the chance fogs did no harm—as they very painfully do in London. The blinding, or at any rate irritating effect from sand or dust blasts in or near Egyptian towns arises, of course, from the organic matter. It was a wonder people's eyes came off unhurt from the camps at the universal folds, styes, and sinks of wells. I think I recommended a veil over the eyes when sleeping in the open during

a radiating night.* Colonel Potto condemns da eye-glasses, dark paint or powder on eyelashes, and commends "papakha," one of the most important wor in the whole treatise on "Steppe Campaigns." T word, however, is not in the English translation; ve likely because the English Captain may no more be ab than myself to find this word explained in dishevelle travellers' books, or Russian and other dictionarie likely to contain words in daily use among the Cau casians. What the Captain and myself can gathe is only this, that the eye-protecting material is dar hair. It may be a horse-hair veil or vizor, and in tha case would accord well with the habit of the Touâreg Bedawins in the Sahâra, who generally *wear the veil.*

On Régime in General.

I find it necessary to recommend in places with climates like these a little more drilling than usually practised now-a-days. It would save a constant and injurious recourse to drugs. The change in muscular play, by relieving long slow rides with hours of walking —however uninviting at first—will be found not only comfortable, but salutary. During days spent at wells let every man not bound to move in work be commanded or perseveringly recommended some bodily exercise. Laziness encourages disease by breeding intestinal uncleanliness, if not fevers and such like. If there be no game, those fond of hunting should do a good walk, or several short runs—whatever the ground be. (The general rules of measure and discretion which keep one

* If the veil covers the whole face it may protect the system against feverish maladies, usually caught in Egypt, it is said, by sleeping in the open on nights with quickly changing temperature.

in condition at home hold good—it seems necessary to repeat in this age of mixed counsel — anywhere.) Crawling up before breakfast or dinner to mountains of stones—under whatever sun, and often even before or after a day's work or ride—will be found better than aloe and rhubarb; specially if you leave your sucking-bottle—field-bottle I mean—behind. (The Bedawins have no field-bottles—unless a small water-skin on the animal when bound for a journey.) Heaving up large stones and dashing them amongst the others to pieces, may be found more exhilarating than some dances. On Sundays I should have the men drilled in a short parade. Most necessary it is to keep life in the healthy people circulating, during those exceptional longer stays of the camp; as, while waiting for relay camels, for the recovery of the gravely sick, and such like. Besides that, all tents should be daily shifted—if the state of the sick permit—for sanitary reasons. Some good rough games, for instance, games with desert stones, in the manner of quoits should regularly be practised. The movement would reduce the crowding of many a sick list; besides being exhilarating in growing pleasure. "Your merry heart goes all the way," &c. A piper, or some such human and humanizing agency, as of antiquity in Egyptian donkey-caravans, should be obligatory. Some national "Punch" for the men of little obligatory care, and a good caricaturist—who does not publish—for the men with greater cares, are desiderata. A monkey or two would be a good addition. Bad as our social arrangements were, the four in our working party had many a merry hour; which, however, to detail in print is neither in my style nor, I believe, to the taste of that class of readers I endeavour to interest. Quiet days in camps would not be

found even demoralizing if more care were bestowed on the physique. But I am afraid the neglect of these necessary and agreeable precautions will not be much heeded before a century's special statistics will have been collected to shake people up from a fatal torpor. It is the fault of this age,—so alarming for the confusion of unqualified counsel,—that such ideas have become endemic, as that northern air is "bracing." This assertion appears to assume that ozone to refresh the nervous system and exhilarate the spirits is confined to high latitudes, where alcohol seems so necessary to preserve living human organisms, from something which must be like two-hourly bites of cobras and vipers, judging from the nauseous and caustic remedies resorted to. But this is an endless subject. I have also learnt in these dry wastes a lesson from a friend to whom I owe gratitude for a chain of kindnesses. Don't become addicted to any habit which may possibly be construed into taking medicine. Don't deceive yourself into infirm slavery, by keeping handy some fashionable drug—not even effervescent salts. Never mind whether they are advertised by poetry, painting, or "science"; whether they are "universal," and mentioned by name in vulgar fatalistic novels in bad taste as conducive to "comfort." The dictum of my friend is only something like this sentence: If you do not get alarmed and do not meddle with the little caprices of nature—headaches, and such like—nature will unassisted recover herself. When the centenarian Fénélon was asked by some sparkling princess, in a party, how he managed to keep so joyous and young, he replied that when a young man he lived as slowly as respectable old men do. I am among the last to discourage occasional indulgence in

"comforts"; but I have seen in the deserts and elsewhere astounding tenacity of health owing greatly to readiness for voluntary abstinence for any reasonable length of time. It did one good to see the unostentatious ease with which several gentlemen dispensed with half or three-quarters of what should have been their food. It was pleasant to see them in apparent full health—unwilling to confess the presence of any inward monitors—to see them cut off wine, coffee, and tea entirely, and reduce even their drinking water, "to leave some in reserve." One "confirmed" smoker I have seen giving up all drink except flavoured water, and even smoking for whole days on the eves of those in which he expected to hunt difficult game. He abstained, he would say, "to steady his aim." Habitual abstemiousness of happy martyrs, or of grim heroes, is out of my province.

Some physicians' counsels stand in my way:* those recommending to healthy men bound for the tropics to move as little as possible. This is tantamount to say, force yourself into illness. As every sensible enjoyment either of work or pleasure is likely to be sweeter in a friendly climate than in a coarse one, so is the enjoyment of repose. But repose in all climates is the sweeter the harder it has been earned: and though I may want, after an eight or twelve hours' ride or walk over heavy ground, an adjustable couch, with adjustable easels for reading, writing, or drawing, and adjustable lamps, with the addition of a travelling-case for a few books within reach of my left hand; though I may want all this in Siberia more than in the Sahâra, or in

* Not of those who recommend their tottering patients one kind of caustic alcohol in preference to another, "if they MUST drink some." . . . If they MUST make ——— ——— of themselves. If!

Bombay; still I am likely enough to enjoy it better in the riper and airier places.

Our organisms were acclimatized in Lower Egypt, in nearly all cases, very long before we embarked for the deserts. The seasoning ailments were mild fevers, persistent and recurrent dysenteries, ephemeral agues; or, with those Achillean enough to parry the rest, prickly heat with festering buttons at the heels—a sort of "cold" merely uncomfortable for weeks or months. Of dysenteries I know nothing. Of all the fevers and agues I have seen, I have been told they were revivals—brought in the system of those who had contracted them in Europe and elsewhere. But on the whole we were not worse off in the most dreaded season of the hottest deserts than in the resorts of health at the northern parts of the Nile. Two of the maladies chronicled at the very beginning of this sanitary chat were seasoning illnesses—or rather reappearances of disease in systems impaired elsewhere.

I am not aware whether competent physicians have yet begun deducing the principles of human acclimatization from the wilderness of accumulating particulars. Such labour would seem worth as much effort at least as the pains bestowed on shifting plants and animals.

Dr. Hufeland says in his "Makrobiotik," that to civil engineers, and other people of rural habits, no rules of régime are necessary; they may just live as they please, and will remain proof against all maladies. The majority of this delightful and noble profession, showy in health, seem indeed to follow the celebrated man's advice to the letter. Indeed, as a rule, they too much affect the "roughing" it. The result is an appalling mortality in the ranks of this profession —patent specially on the continent where professional

statistics can be well gathered. Of the liability to this tremendous mortality, their worthy colleagues seem however not aware: as sanitary engineering has, up to the present time, been considered as a speciality by very few of the profession. About this professional health, we came, in these tents or rides, from personal observations, to *these* conclusions. Men much in the open air and on travels—whatever the climate—require even less stimulant than other people; yet they are notorious for indulging in it rather more. They indulge because they do not feel the evil consequences AT THE TIME. But the violent maladies and all but sudden deaths of these people in the prime of life may safely be ascribed to those indulgences as much as to wilful neglect of other sanitary laws.

Water, and other Drinks.

The water along the eastern T of our surveys was, during our seasons, wholesome and palatable—whatever its hue. On the western |, some produced fevers and dysentery. The quality of the waters from different bores in the same cluster was very different; and many of the wells were offensive by their very stench. Therefore, on the whole, great precaution is necessary.

There is one "well" on our route to Khartoom so refreshing and salutary that it is fit for a sanatorium.

Deserts like some of those in Asia, described by Marco Polo, may prove fatal, indeed, to people ignorant of distilling other fluids than monster-preserving alcohol: if there be a succession of objectionable wells of which the "aigues" or "yaue (water), qui en beuvroit une goutte, si le feroit aller, de route, bien dix fois à

chambre (!) . . . que celle yaue les fait si espurgier qu aucune foiz en muerent."

Immoderate drinking, even of good water, may prove fatal in these deserts; or ulcerated throats may be the consequence.* The scarcity of water may prove disastrous too. But I hardly think a certain French commentator on Strabo, or some one in a recent Oriental paper, right in attributing that partial paralysis of the legs, prevailing among the soldiers of incapable Aelius Gallus, to the water. The cold winds penetrating unfit dress and sleeping on the chill soil would bring about such an ailment anywhere. A friend among the English contingent of our party lost his bedstead; but through sleeping on tarpaulin, mattress, and sheets, he caught such a rheumatism that it may last him his life. And it is not to be supposed that A. Gallus, the most idiotic of all Strabo's friends, should have studied the health of his soldiers—and provided each with felt sheets, or skin rugs.

Rheumatism, contracted from careless dress and chance sleeping, is general, among the hardiest sons of deserts—from the Sahâra to Gobi (compare Duveyrier and Sir Douglas Forsyth). As Duveyrier reports, ubiquitous British merchants having inundated even the Sahâra with Chinese tea in the face of good coffee, so they may soon introduce merinoes and flannels also—if their good old reputation for honesty have not become of late too much impaired.

What any of these wells will produce—especially after rains which filter the decay of a year or more into the wells—is deadly fevers, and deadly dysentery. Ask the Bedawins of Africa and Asia, and ask the Kirghiz if this is not so. Various matters are blown into the

* "Climate of the Levant," in *Blackwood's Magazine*, 1879.

wells, even between rains, enough to produce such a result. But I do not think the present generation will accept what I find in a translation of Vertomanus, "In these sandes is founde Momia, which is the fleshe of such men as are drowned in these sandes, and there dryed by the heate of the sunne: So that those bodyes are preserved from putrifaction by the drynesse of the Sand: and therefore" [Wherefore?] "that dry fleshe is esteemed medicinable." The Cannibal!

This infected water, then, is one cause which played havoc with many a caravan, mercantile or military. Yet do we ever hear of portable stills for distilling the water [the pleonasm is intended] forming *indispensable* parts of commissariats? Cleaning the dreadful sewage from the bottom of wells before use, reads pretty well on paper. Charcoal of wormwood and alum, and pocket filters, sound clever enough. But these will not purify the waters from all, and certainly not from the *worst* taints. It is marvellous that chemical paper-slips or other ready means to test waters are not familiar articles of commerce yet in towns on desert borders, and in the stores of arsenals, and in the little medicine chests of explorers and travellers.

I need hardly say that we enjoyed at lunch and dinner our light wines in these sunny mobile deserts, where these juices soon assume the precious qualities of wines much older. The wines, indeed, age even faster than some foreigners do here, who soon contract "crows' feet" on their faces. Their wine seems to compensate them by its growing virtue. Compensative and reconciliating charm indeed: noticed in changing blue melancholy into rose-coloured aspects; noticed in changing,

when young, young men's faces into wry grotesques, as if they were old; and when old, making old men look young again! But with wine, as with dances, measure must be observed.

Beer—the drink of Scythians and negroes—which, I suppose, must be kept in antiseptic coolness to be at all a tolerable beverage, is no good during that season which is without cooling evaporation and radiation.

Tea was a general favourite—with the English contingent of the expedition and some of their native servants, it was sometimes taken three times a day. We liked it the better for its usually having been half milk at least. The milk was either fresh goat's milk of more delicate flavour than cow's milk, or it was diluted from condensed milk.

Of cocoa and chocolate—let it be the best or none—much was taken. I improved my cups with certain spices which go well with sweets.

Coffee was general with all ranks. If any of us took coffee at breakfast, it was prepared Greek fashion; after dinner we had it Arab-wise.

If there are two things salutary and grateful for a "*cold*" pic-nic lunch in the hot desert, they are wine and coffee; but specially hot coffee. The Arabs, whether Bedawins, or soldiers, or servants, are ready to make it anywhere, at any time. And all ranks should have it whenever reduced to hard juiceless food. Surveyors in deserts cannot afford to spend a preponderant part of their energies in digesting dry mutton with lukewarm or cold drinks.

At odd times, especially in camp, water was improved by pure juices of European fruit having a slight dash of vinegar. These, as supplied by manufacturers in London, were generally preferred to the French juices,

which we thought too sweet. If all "lime juice" is as violently turpentine-flavoured, and as outrageously astringent as that which a respectable firm supplied as the best in England, I cannot see the wisdom of making *this* exotic juice obligatory in official expeditions to all climates. The tamarind juice, and some other juices of the country, were thought by some Europeans better and more salutary than any of the rest.

As far as I am concerned, I have trained myself from youth not to feel thirsty between meals. During my desert work, which was regular, I generally carried a bottle of cocoa with some biscuits into the field, for consumption three or four hours after breakfast. During our dreadful retreat—in the "rainy season"—which was with us chiefly the season of dry sandstorms and great thirst—I got water more irregularly; but I think I managed the biscuit nevertheless. During the season when evaporation ceases, men should be very particular in abstaining from all strong spices, and violent pickles; they should also reduce their drink. I found this abstinence from even water rather wholesome. When thirst became imperious with me, it was generally a sign of hunger also. I think there should be harmony between human hunger and human thirst. At least I have seen much suffering and degradation resulting from the divorce of these two desires. And I am prone to think it unseemly, at the least, that men should become by choice too much like young sucking animals or old drugged invalids.

I hold the abstinence I strongly recommend is much easier in these climates than is generally believed. On the other hand, adaptable natures enjoy very much great variety in the little they take. So, if people can

afford it, let them have a variety of sound light wines —besides a few reserve bottles of real Tokay, or at least Cyprus, or even Lacryma, rather than questionable champagne, for the sick and convalescent. And let there be a choice selection of flavouring essences for water, specially if distilled. And I should not grudge any discreet person the weakness after dinner or lunch of a thimbleful of some choice liqueur, if it be very refined and pure, and subdued by good flavours.

Food and Cooking.

The Bedawins seem to have provided themselves with little else than grain, and a sort of milky butter, both of the Nile, as well as the dark nuts of the desert salt. The soldiers had biscuits, lentils and other legumes, and onions. Both classes of men had coffee and dates. Milch camels were a rarity in our hard worked caravan. For the rest, people trusted to Providence.

Sometimes we could procure mutton, at other times venison. Of this fresh meat we made the soldiers partake as often as possible; but there was not much of it. At rare intervals there was enough for the camel men also. But there is no need to be too anxious about the Bedawins' larder. They often had venison when we had none. The tortoises were theirs; and though we did not begrudge them those, some of us felt rather hurt that they *never* offered us part of the venison which they feasted on in secret. For one, I do not think those ghazel traps I saw peeping out between the loads of some camels were made and carried by these men for nothing. Their roaming about very far from camp cannot be explained as necessary for their camels

or for mere exercise. Such things as runaway deer with *mortal* wounds, hit by the princes of the party, were also to be seen. And finally—not many miles from camp—I came across horns and bones which were the remains of jolly good meals on fresh venison, at times when we went without. However, we will cast a veil over these matters.

The modern art of preserving all kinds of victuals for exposed people, and still more the skill of our cooks, made us often forget that we had no fresh game or other native meat. With all our variety, however, we did not

> "Spur beyond
> It's wiser will, the jaded appetite."—DR. ARMSTRONG.

We returned to our old loves. If we were—most of us—fond of nicely picking morsels of many good things, we chiefly "*fed*" on the favourites of our infancy and boyhood.

Succulent vegetables, soft milk puddings, fruit, and bread made the preponderant items of our meals. Our soups—as far as soups can be called palatable without the juice of fresh meat, marrow, cream, and butter, and such like fresh things—were chiefly enjoyed for their rich contents of choice herbs and roots, grains and seeds. Fish and other marine monsters were flattered by sauces and vegetables rather imperfectly. The meat of the other dishes was decorously subdued, and nearly suppressed by more refined matters, animal and vegetable; but chiefly by the latter. With most of the cookery a kindred material was used, I believe, with what is used in a kindred art: very pure oil. Roast we had only on game-days, or when a sheep was killed; and instead of salad we had asparagus. Preserved or condensed eggs we provided none; therefore we had to

dispense with much which, along with cream, butter, and various other products from milk, as well as brains and marrow, hard baked little fragments of bacon, &c., helps so much to make Greek cookery so rich in variety and classic taste. Of course the material would not make it what it is without the labour of love. The great dish, however, was not the roast, but rice and other grains, tapioca, sago, arrowroot, and such like, cooked in much milk. As our appetite was very healthy *in all weathers*, and our powers of digestion only human, we naturally indulged where indulgence is the least hurtful: we subdued the FLESH, but our taste compensated us forty-fold. This starch-and-milk, specially, with a certain humanizing treatment, I found very palatable, even without any of those various spices and flavours which were sometimes added.

Bottled fruit, jams, and other preserves, we had liberally with all meals—even with midnight tea. For figs and dates we did not much care. Dates are hot; but cooked in milk—and probably with a dash of oil for the sake of human manners—they become tempered. I do not know whether they are first boiled in water, like Spanish onions. Speaking of dates, I begin to feel apprehensive for the consistency of Islam. The faithful are forbidden intoxicating matter; yet their dates are intoxicating; so is their bread; so is camel milk. Much as we partook at all meals of European bottled fruit and jams, the quantity of the fine apricots consumed was rather more than all the rest put together. They were sun-dried apricots from Egypt or other places of the Levant, and we had full camel loads of them. Though we ate much of them in camp, they were indispensable with our out-of-camp lunches, whatever other fruit there was besides. The milky soft dishes

were our staple food at [camp-] table, and cold boiled rice overwhelmed with alternate fruit in lava refreshed us at [bivouac-] carpet.

Our English compressed biscuits, and the loose biscuits we had had made up with a mixture of our excellent Russian or Hungarian with Saudani flour, were equally good. The brown bread of the ancient Egyptian tombs formed a third class. I call by this name the flat, soft, yet well baked loaves; juicy, yet not clammy, and aërated; consistent, yet light. They are sold all along the Nile. Their cross-cut is a span's length. For journeys they are cut through along their antique cross-bun marks into four, and baked again into biscuits. Speaking of cross-buns, I think of the evil pastes which are intended for pastry in some Northern and some Central European countries in general, and in the South with exceptionally bad cooks. The baking of fresh bread was also attempted in camp; but as the result was, after repeated improving trials, only some hideous-looking sheets like pale tea-napkins, we stopped further attempts. Besides, it was not worth while aggravating the hard worked servants. And the browner biscuits were as nearly perfect in their kind as the other two kinds: all were certainly incomparably better than that detestable acid bread (German or French) which spoils all the meals in the best hotels of Cairo.

After one or two attempts at pastry, we strictly forbade any others. I think mobile and hurried camps are not the places where even good cooks would succeed in this.

Whatever physicians and women of quasi-Teutonic origin may think, and on whatever they and the children may thrive, it seems an old principle in the Levant that eatables corrupted by nature are harmless

compared with the fatal crippling by the fermentation from even one specimen of evil cookery. I repeat—the worst of nature is better than MAN corrupted: not to speak of women. Captain Galton—or perhaps Lord and Baines* after him—says that decayed corpses may be eaten with safety. An eminent French military surgeon reports, from competent experience, that the meat of the animals infected by the cattle plague may be eaten with safety.

I have seen very fastidious men eat tainted meat, and they asserted that they have not suffered from it even a momentary indisposition. Of the fatal influence, lifelong sickness, and premature death, which is obviously traced to bad cooking, none were graver in my small experience than maladies from such cakes, bread, and what should have been crust; which looked raw, lardy, condensed; which were heavy, tasteless, and could be carried about *entire*—ay, even resisting shakes and jolts. Proper sanitary authorities in the Levant—those few who exist—would treat a baker or a "pastry-cook" who would display such food as most Teutonic pastry-cooks do as the law treats an incendiary, or at least as English law treats those who sell things doubtful only by neglect or by natural agencies. But amongst Teutonic people—and that at inns where wholesome cookery should be as obligatory at *least* as unadulterated beverages—I have seen what one might call "cakes" and "puddings" and "pies" habitually consumed by young and old, animally strong and delicate people, the mere memory of which makes me almost shudder.

* Authors of a book on "Shifts and Expedients of Camp Life and Exploration." It is a pity that even the new edition of this book, intended for travellers, should be published in a size almost folio, and printed almost on pasteboard, with almost the type of a hornbook.

Mere taste is safeguard enough to keep anybody from maladies from such sources—though extreme hunger will sometimes commit even people with taste to such dangers; if no leather, leaves, bones, wood, corpses, or other such stuff fitter to eat be procurable. Somewhere in the Levant I have seen bread judiciously confiscated for the mere reason of its excessive weight—*mole ruit sua—dead* weight.

The reason which makes bread tasteless or worse, and at the same time deleterious, is generally ignorance, the shirking of labour, and of care—in places where accommodations are at hand. In the case of deleterious pastry [usually with vile taste], neglect, want of taste, of skill, and, in most cases, of expenditure, combine. For good pastry—it is hardly known in the West of Europe—is labour-requiring as well as expensive: but even more laborious than costly.

About French preserved vegetables I must repeat the warning to beware of them, whether they be dyed with poison or something else. To the English preserved vegetables—hitherto safe—I should prefer a supply of the dried products of the country. They are richer and more refined in flavour, are better suited to the climate, and the native cooks can make more of them than of the heavier burdens in juice and tin. The large green capsule, with tender seeds—sold all along the Nile—form a kind of more transportable greens.

There is the antique onion, all dress and tenderness, like ever novel women.* Yet, beware of them unsubdued by cooking, lest they anger your eye—more than mirage and sand and smoke—and finally make you over to undecorous and fatal thirst.

* "We dress our women like onions"—or some passage to that effect in the *Saturday Review*.

For the very hard work in dry warm climates or seasons, savoury ripe pulse with onions are eminently appropriate—as a staple dish, in and on which animal matters should only serve as accessories, seasonings, and ornaments. It is a pity that millet be so little appreciated in some countries. It is nutritious, very cheap, fit for the nicest stomach, and is good-flavoured: either cooked in much milk, and then sweetened with honey and seasoned with cinnamon; or simply cooked with salt. It makes an excellent pudding with bacon and fried onions; and, without going into a fuller catalogue, it makes a delicious broth when cooked with small pieces of fat lamb, sheep, or poultry and bacon.

In general I fared better when depending more on good native cookery than when treated obsequiously to imitations of northern or western European curiosities; which always looked to me, in the Levant, doubly barbarous.

Chief Occupations.

I have often found it difficult to distinguish between work and leisure—according to popular modern notions: I am not referring to the average style of present continental work. I think the masculine body is better for very little change in its movements and attitudes, and a good deal of rest; the virile mind can do with that little rest it may get in sleep, but is the better for a good deal of working change. Explorers—whether commanding sailors or soldiers—and acting chiefs in general, who testify to this, preserve their balance perhaps even better than other men who—to speak of respectable people only—vex themselves with nicely calculating with how little of useful and how much of

questionably pleasant reading they may relieve their obligatory work.

Having had to be quick with my preparations in London, I only packed such few books as I am usually content with during professional wanderings; and hoped to find in Cairo means to learn the language, and much about the country I was to be engaged in. There are several bookshops in Cairo, and they all look flourishing; but their contents are grievously disappointing. As to the objects I consider most necessary —and first, the language—there was, in 1875, in Grand Cairo, flooded with Americans and Britons, not such a thing known as an Arabic grammar for people whose soul delighted in the English tongue. Instead of the proper and natural thing there were two most wretched pocket books called interpreters or vocabularies, the fuller one printed entirely in Latin characters with arbitrary notation—with appendices of a couple of pages of "ample" grammar. There was, indeed, one copy of a decent dictionary on sale; but what is the use of it without first having worked through a grammar, and without Arabic books, unless you have leisure and what not, enough to compile a fragment of a grammar out of a full dictionary? It is strange that London publishers of Oriental literature, such as Messrs. Allen, Madden, Parker, Trübner, &c., do not flood with their books such a market as Cairo, or at least such a station as Charing Cross! Next of the topographical books likely to sell in Cairo. The bibliography of Africa forms a whole volume—I saw one published at Paris. But of all the works described therein only an infinitesimal portion was shown in Cairo—and that, with one exception, not the best part: indeed, the few books procurable were as useless as they were unentertaining. What they did

have in abundance were continental editions of novels, ill-stitched and uncovered. Books, more necessary and more useful, appeared as fitful curiosities—*rari nantes in gurgite vasto.* The booksellers will say that the high-class and mature section of the American and British public which colonizes Egypt, or sweeps over it, are provided with their useful and pet books before they leave home; and in Cairo they are content with the pocket interpreters and new romances from Leipzig. Here is Kingsley's "Hypatia," the charming philosopher of Alexandria; here are Dr. Eber's two ancient Egyptian romances; Lord Lytton's latest ones. Miss George Eliot, with some lachrymose heroine, and a woman-made hero "beneath the notice of a poet's horse-whip" . . . Well, this is all very pleasant reading. "Here is Charles Lever." . . . Matter of taste: not for me. Then he mentions some impudent female and idiotic male novelists, not fit to have anything printed but their warning cards . . . till he catches a quiet look of mine and apologises . . . While he was yet speaking, I calculated that the man—like his colleagues in similar places—thinks that his selling books intended for slow reading will diminish his profits. If a forlorn traveller or foreign resident of very uncertain stay wants very much to buy books, in such a place, in a hurry, and he find no serious ones, he is very likely to buy three or perhaps thirty light volumes for each harder one. And, possibly, the profits of sale may be larger on each volume of a light novelty than of the others.

I was, then, degraded to test the value of those tourists' vocabularies, with ready cut Arabic sentences for no use, printed in Latin characters. Such educational charwomen are—to use a Germanism—"good enough" for people with little-trained brains, and may be handy

additions, used sparingly, even while people are under better mental training. But the *sole* use of these palliatives, in our case, was tantamount to living from hand to mouth: nay it was argic* begging with the ruling chance of vain pulings for remainders of information. The result was piteous compared to what

"it might have been!"

These books of waste-paper were thumbed during work, on camel back, during the very meals, and in the solitudes of private tents. Besides these wild dives, some linguistic lessons rhapsodical—or rather unstitched—were taken chiefly on camel back, from the lieutenants. The consequence was, that Arabic was echoed from our larynx, parrot fashion; that we took monstrous time to con a few morsels; and that we forgot our previous "acquirements," held on trust, under the process of making new ones. Of course, having begun without the alphabet, we could not even read an Arabic map. Had I spent all the time I lost in this undignified process, over a good full grammar—of course comprising the writing of several hundred pages of exercises—all my transactions with the men of the soil would have been more effective and much easier. I do not count the pleasure of the play and the addition to reserve capital. This is only a special case of the palliative tricks to make "science easy." I found in these deserts, as well as elsewhere, that there is time and fitness under most circumstances to have a daily hour or two of devotional reading: under the head of duty with professional men I count such scientific reading which is beyond daily or occasional hand to mouth references.

* O, for wise Solon's penal laws, energetically obliging, which convicted for the crime of "idleness" those ἀργίας ἁλόντες.

Of course some pages from great books, to make one look a-head and survey from a good point, to make one dream a little, or to provoke healthy laughter, are appreciated. If one has sometimes to "work hard" or run fast and shy for the sense, the enjoyment is the keener. And for a change one may turn to more familiar pages where the old lines smile in new meanings. During all this time, and the other six months I spent previously in the Delta of the river, I allowed myself to read two or three novels by respectable authors, which gave me much pleasure, some good lessons, and a good deal of instruction; but this was rather more of that style than I read in town, where weightier studies are ready at hand. The few weekly papers which found their way sometimes to our camps were also more than I usually care or can afford to read of other people's concerns and promiscuous news; I take as much interest in "how my heavenly Father governs the world" as most people whose opinion I value do. But I cannot endure standing agape, and prefer essential and reliable information whenever any concern me near enough. Besides, I see and hear enough and to spare of news—as I am rarely quite alone. For the rest, I have resigned myself to bear with fortitude my ignorance of so many worthy things while attending to my own poor business: a little humility will do me good. My insignificant position in the world dispenses with my necessary omniscience of matters current and indefinite. For my interests I have found the papers useful only at very rare and odd chances of business—perhaps not even worth mentioning. And as for amusement, my apologetic tastes do not tempt me as a rule towards fresh, hurried marks of professional or amateur hands.

Having said so much with intention of easing some

friends' minds of the weighty and constant care about light reading and currents of print during hours not immediately taken up by duty, I feel drawn to jot down something about the action of climate on study—a topic so much agitated in these times of alarmingly feverish minds. Educated men who live for purposes worth a human being, and who consequently have a programme of progressive duties, I suppose know what care is due to the body, and for how long the flow of work in one channel may be suffered to go on before letting it jump in the play of a weir, or before letting it rest and settle, or collect and elevate in a lock, and before letting it run on again. I think mere weather—or "climate," if you prefer—does not interfere with mental labour in the manner in which it has been fashionable for some time to parrot about this matter. Illness; severe strategic or absorbing tactical operation; the multifarious toils of first explorers amidst crowds of important novelties and engaging dangers, interruption by unnecessary human noise or unsought company, unsettled accommodation, loss of power by slavery of some sort or other, offering distraction to inferior purposes or none, besides other obstacles to study (or call it meditation, planning, retrospect, and preparation), are likely enough to arise in foreign parts under any climate. But the chief grievances in the tropics about which we are so often told by travellers and foreign residents is the "general unstringing" of muscle and brains. I myself have often been axiomatically told by kind but misinformed friends, that I cannot (or should not) work in these and similar places as I might in Europe. . . . .

Let us see. The field work and the travels I went through in these climates I count, on the whole, among the finest things of their kind I ever enjoyed under any

climate. This implies, of course, the satisfaction o
having done rather more work, and stood rather mor
fatigue than formerly elsewhere. I trust there ar
thousands of Britons—men, at least—in the tropic
who could say as much for themselves. I should b
very sorry—indeed, it would be a new source of distres
to me—if I could do less work of any kind in thes
healthy places, dressed in light gauzes and silks, or th
lightest of furs, than I did in the deep snows and hig
winds tempered to something like zero Fahrenheit
when my merriest paces of work were those resembling
shackled ice-bear. I do not think those "bracing" place
most prolific of work where a simple day's work i
considered a feat of heroism; where anxious Northern
hosts and hostesses with classic Southern souls treat
man returned from daily work, after having extracte
him from a low fur-boot called a sledge, as if he wer
fresh from a sanguinary victory; where they show sucl
concern as is elsewhere bestowed on the wounded; an
where one gets persuaded that without those petting
and snug chats in the evening, or the joyous partie
they would sometimes get up for their guest, he woul
never be able to thaw up into despatching a laconi
report. Some Ossian may, no doubt, give an exhilarat
ing description of a mighty goblin racing through th
cold heights of clouds; but the amount of astrolabiun
work may fall very short of what it may be elsewhere
even in forests, if for each of the daily forty observing
stations one have to excavate a pit and some tunnel
in the snow. Nor am I quite sure whether I did mor
cheerful work—in a climate boasting perennial Novem
ber weather—with stationary and shifting instrument
in day-long cold rains, with clothes grievously heav
and impeding from soakiness, looking like some scalde

fowl. True that, to relieve the continued drag of bullying yourself into the belief that you are *not sick* and shall not be before your work is done, there is your compensation from those whom *Punch* calls your "friends at a distance." One has just sent you a melancholy musical antiquity entitled "King Cole's Last Will." You hire someone to make a copy, and send it to some other friend with a playful letter. . . . . But this verges on the sanitary chapter, &c., under the heads of strangulating bronchitis, surgeon, lawyer, parson, "graves and worms and epitaphs."

And now to the quiet and sheltered occupation. Let us dismiss comparison with a single reference to working during an eight months' winter, in large offices near liberal windows, with artificial light by day, with open fire-places: your eyes keep bright, and how joyous the dance of your working fingers there! I have said there were, in tents, half-hours of half-rest, during which we became almost invalid. But this, as shown elsewhere, is due rather to the badness of the tents than to any legerdemain of that climate which is so bearable in the sun, or in the shade of palm trees, or in the airiness of a thick-walled palace, or even a thick-walled summer-house. It is not the "climate" or the stars which in summer so greatly oppresses us in the "best" of modern Egyptian hotels, in which most of the rooms are built on the Egyptian tomb principle—or, say, on that of a cupboard.

A siesta of forty winks after forty hours of field work or four of "office" may be rather a special benefit under Southern skies, if properly managed. But let the bugle of duty call for immediate service, or the Æolic strings for provident study; and if the enlightened superstition-born phantoms of tropical torpor, with

all their worry, do not vanish in the cheerful daylight of work at once, spite of chance flies and mosquitoes, it is certainly not the fault of the climate; but of the fatalistic modern Orientals or the fatalistic among Britons and others. "Unpropitious to muscle and spirits," indeed: as if our athletic sports had been invented in Norway, and the great Pindar had sung in novel Icelandic—be it said with due respect to the comparatively modern sagas; as if there were no athletes even among the present Easterns. Where were our culture, where were even the worthier items in our material civilization, had it not come from men mighty in working counsel and instructing deed, from men ripened in hot Egypt, hot Greece, North Africa, South Africa (witness the Greek temples), hot Rome—where the sweltering pet slave used to wear lighter gold in the hotter eight months of the year? (How well this is imitated in London, where scarf pins are not worn in what people here call "summer.") And there were other historical nations, up to the middle ages, in latitudes very far from that which hath embraced the late-sleeping Norse and Eskimaux colonists. Do you think those Anglo-Indians, who shine in the galaxy of this age, would have been more famous if they had chiefly worked in Siberia or the Magellan Straits? Will you kindly remember that all the greatest of even north-born men had their ingrained power from the tropicality of their characters?

The present Levantines are, as a rule, fashionably talked about, as if it were the climate which had degraded them. Physicians could tell how far the fashionable ailments and sick leaves in India are due to what would be habitual over-work or creaking sloth (Proverbs xxvi. 14) anywhere, and indiscriminate over

indulgence everywhere. As a rule, Southern and Eastern invalids are not sent to spend the worst seasons in Denmark or Kamtschatka; but I have very often heard of Northern patients being sent by excellent physicians to spend the worst seasons, and indeed whole years or their whole lives in Algiers, and Egypt, and even the very Sahâra. With the mortality of British children in certain parts of India, please compare infant mortality in certain parts of England during past centuries, and calculate what observation and training, since the sanitary reformer's appearance, went to reduce that calamity. And a less mortality than this now in England may probably be recorded at no distant time, when the centres of culture will return to flourish properly once more in the sunny, flowery old original homes—on the Nile and the Euphrates: as wise men and learned experts have lately told us is not improbable. People are naturally fond of their own new colonies; some of which have not yet had time to petrify their mammoths. But that is no reason for being ungracious to the benefits and charms of fairer and riper countries, with substantial evidences still standing of a culture older than the wildest Northern semi-barbarous mythologies. The tokens in the British Museum may be carried back again from the North to their stationary fellows. Nor should our natural love of our dripping and corroding stalactite dens and caves in a sooty, clammy atmosphere, render us blind to the greater fitness of serener countries for all human purposes: especially as great part of these countries and one's own land ought to be united in the same loyalty.

As for the momentary condition of nations, a short cycle of vicissitudes may disperse them like Jews. Nothing is more imminent in politics than the perishing

in one crash of such a nation as spoils the least responsible intellects by giving them too much play. As the most numerous class among Northern nations have no taste, their betters ought to be careful how they destroy even that little Reverence—*αἰδὼς* more properly—which the race is capable of. . . . "Go it!" Let even the unripest among the classes who prosper—by the petty play of inferior faculties for their own exclusive benefit—be MORE INDEPENDENT than the sons of my toiling Lords and other learned Elders: sons who will, I hope, still be properly kept under the dread of the rod and such like. A "nice mess" you will make of it, I can tell you. . . . A hot climate may corrupt a lazy Southern slave to the cowardly murder of a stranger, or to vivisect or starve a brute; a cold climate may corrupt a free ruffian of sixteen to kick his wife dead. . . . In the East, as it is still called according to our Fathers the Egyptians and Greeks, the childishly wayward nerves are tented by skin and other pads more proportionate to the body than our cobweb graters daily cleaned into wounds: the skin there is tough, yet soft and even, and therefore probably more natural for man, and most fit for all purposes divine. In the "East" harmless pleasures are so plentiful and enchanting that little chance is left for coarse pleasures to corrupt. Perhaps virtue itself is in the old countries—the home of our homes—more lovely than with us: as lovely as it is with souls grown superior through greater sacrificing devotion. Cleanliness is insinuating by its gently refreshing embrace. [You do not usually shudder livid and beat tattoo with your teeth in the East, while you call your daily bath delightful.] . . . Yet, with all charms in tangle, the soul is likely to keep so gently subdued that in no other countries

is grievous suffering and cruel death met with such serenity as it is met in these more perfectly parental countries. . . . But we see every day that no place is so good and well prepared for virtue, but that man will corrupt it by indulging in nauseous pleasures. . . . Who knows but even the most powerful of the races of to-day may soon become such perishable goods that their flower, "heir of all the ages," will have to emigrate in order to be preserved in Arctic or Antarctic palæocrystic ice. That *élite*, recruiting, will probably form, with four-feet Eskimaux and seven-feet Patagonians, a new race. That mighty, heroic, sentimental and incongruous race under petticoat will form a jolly last colony central and Polar, ruling supreme over degraded "Southern" Britons and the rest of the descendants of their Fathers and Masters. The fashionable cooling drink will be something like lit petroleum, sulphuric acid, and other Russian and Parisian liquors; and the fashionable cookery similar to that of some Cossacks whom I have met. Treated in a more liberal climate than what is as yet their own, to a rich and elaborate dinner, they began re-cooking in the dining-room, like the descendants of the woman-insulting Trojans do. For this purpose they called for a kitchen tub; greased it well with soap and half a dozen tallow candles, and put it on the clothed table; emptied into it the fifteen courses, masterly prepared to propitiate them, and stirred the dishes well together, supplementing them with raw material, such as unripe fruit and kitchen offal. Among which were, I believe, the entire feathers and head, &c., of a turkey. If my stomach had permitted me to remain witness a little longer, I might have seen them add a hashed crumb-brush. Further, I might have seen them drink, from the slipper of the δέσποινα

(the lady of the house)—whose absence was graciously excused—and afterwards from the shoe of the highly approved cook, a "delightful" mixture compounded from the liberal cellar, the opulent dairy, the pantry, the large medicine chest, etc. After these ceremonies they returned, I was told, to their cups, which they had wreathed with plaits of natural "bigoli," that is, ringlets of their last love's hair. The feast was graced by the enrapturing music of a regimental murderous English barrel organ, well calculated to put any decent enemy to flight. The engine was played, or rather worked, by a vivisecting Italian maestro. The infernal engine was an ingenious combination of sharpening saws, creaking wheels, imitations of caterwaulings and of certain human sounds, too monstrous to name in this delicate century. The music was made still more impressive by the manner the conquerors of the despised world beat, in beatified ecstasies, the time: affectionately, and touchingly, each man hammered hard with his resounding fork, between two mouthfuls, on his right hand neighbour's perfumed head—for a jolly wreath of conviviality. The eating of these tuning forks was tried by some, as a manly feat, and all touched their teeth with the forks still vibrating, to impress the music still better. Of their other arts I may speak elsewhere. . . .

Think of the inconsistency of charging with degrading tendencies those climes which have kept us provided with so many essentials—the very language too—which make human life superior to mere animation. Do these good people really forget in the wrong serpentine currents of tit-bit "information" that those well-lodged nerves of those ancient people were enshrined in frames which were the models of Greek statues of gods, and Greek masterpieces made in Italy, masterpieces in stone

and colour, representing desert people? Have they never heard of those classes of infinite poetry which is seen and heard, but not to be described, in the gait, general movements, play of features and voice of even modern Greek women—in the Levant, in the towns of England, and some corners of France . . . . And the Most Supreme of Arts—the Christian Art of Doing Good to our Neighbours, to our Enemies—did not even this come to us from those abused perfumed gardens of spices? Do you think the Scythian dawdling, nay funereal style of conferring benefits and exchanging "amusements" the best? Don't you think these offices were all the better for the Eastern judgment of Solomon, the Oriental tact of Haroon-el-Rashid, the Attic playful persuasive wisdom of a lovely and insinuating Socrates with his feathery titillations? Do you think it took away from what her learned Oriental brother enjoyed by his hospitality, that that lady perfumed HIS Anatolian feet with those liquid jewels his princely nerves were fond of? Does the poetry of that soft cataract of sublime female devotion, turned into towel and footstool, not go home to you?—Do you think Bagdad, and Thebes with the hundred gates, were slipshod countries with a society of haw-haw ghastliness, cramped in conventionalities, no doubt necessary under the circumstances? [Better not mention the plums in this coffined pie, meant for hilarity.]—If you would graciously descend to know the dialects of even the epigones of the sun-gilt Great Old Nation—if the "liberal education" of our universities would not frown away the idea of young men becoming interested in these living dialects—you might see among them even now how intimate the Graces are ready to be with the Lares and Penates. You would find hospitable

Jove charming you in almost every house. You would find dear rosy Anacreon in conference with the witty Deipnosophists—

. . . . ἁβρα γελῶντες,

"laughing sweetly," resuscitated in the tempered, refined Symposia. You would marvel about the extent and variety of in-born arts in Amphitrion everywhere. He would coax as many senses as you have got; and resuscitate dead ones; and most probably inoculate you with new ones for your delight: till you feel more than reformed into a jolly child—apotheosized into a joyous Cupid with tickling tears—aye, in fine, as joyous, as gorgeously imaginative, as happy, as sorry, as good, as naughty, and as lovely as you used to be, you know, of old. THIS is RE-CREATION, my child—true palingenesis!—But then, in those unstringing climes, they had such and so many strings, vibrating in vigorous thrills of self-adjustment, to the bows of their lips, as only those could faintly imagine who may be—at the cost of never mind how much—familiar with Old Greek, if not also Sanscrit to follow that familiarity. But judge from the still fainter mirage in modern Greek—which, you may be told, is believed to be in the same ratio with the Original as the more violent and sphinctical lingo spoken by female "Northerners" is to the Queen's English. A young woman, however, who speaks one or two of the modern Greek dialects—ever effervescent like the savoury springs of Transylvania—told me a different story. She told me, even while regretfully confessing herself illiterate, that there is such vigour and play in the language of even those Greeks who cannot read properly, that swarms of their expressions "wring one's nose" as it were—I suggest, in my poverty—"like horse-radish.". Moreover

a scholar tells me that this language—ever young like the heroes of its myths—smilingly obeys good living authors as they gradually lead it back into the Attic forms. . . .

But

Why, O why?

and how long is this undignified squabble to last between Moral Worth in the mask and rig of Australian or Scythian idols, and the semblance and apparel of intellectual Grace in adultery with degraded characters! How long, I say, is this separation, marring both parties, to last? For ever?

A throng of various details tempts me further; but it is time to work. Here goes. . . .

After an hour's leisure in tents, or such work as I manage while shifting on the ground, shifting a little, as if stuck to the ground, like some remarkable beetle, by the tent-pole, I begin thinking of further change. "Yah Hâneffy! I say! Ask the valiant Abd-el-Banduqeeyeh if he is ready to shave my head?" Let those who want consolation for self or friend read the delightful Synesius Bishop of Ptolemais' essay—*Ἐγκώμιον φαλάκρας*—to prove that baldness is rather desirable than otherwise.

I do not see how we surveyors could apply the good training rule enjoining some complete rest after bodily exertion before attempting mental work; because both my bodily sport and mental play is combined—delightful mixture! But, I suppose, that complete rest means, with people in well maintained condition, only a dozen minutes or so. It is not only that our camp work differs from sedentary desk work by our handling tremendous sheets and endless rolls of plans which

necessitate all sorts of funny attitudes:—the recorded rural observations must be construed and translated into the shape of maps and other diagrams daily. Night watches and observations have often to be made. Optical and other instruments must be looked into, and cleared from arenose dust. Sometimes instruments must be invented, and tools and materials be found. One was constructed which took a volunteer — the "poet," "physician," and general "genius" of the party —several weeks' "leisure hours." The state of the commonwealth has to be kept in mind and governed. And this is neither a very simple task, nor always a light matter. For as the itinerant whole changes place, so the parts are always iridescent in metamorphoses. Both general and minute orders must be framed, given, and seen executed. Discipline must be maintained, justice must be administered. In such isolated enterprizes even petty authorities, such as we were, have power over life and death given them as a necessity by the Government they serve. Our political life had no history. For the Bedawins had sense enough to respect the authority entrusted to us—though we were only fallible mortals. The reason why the Bedawins had sense enough was, that there rose neither demagogues nor two-hourly newspapers from amongst leaders, officers, common soldiers, or servants, to dictate to us leaders how we should obey the laws of Athena, Urania, Asclepias; and, more especially, how to conform to the wishes of our chiefs in Cairo who appointed us to hire these same Bedawins. Of course these fine men, who have seen a good deal of the world, were occasionally asked to sit down in the big tent, to give us their opinion of what they might be supposed to understand. And they, like sane people, had sufficient modesty to

push forward as spokesmen those who were known to be the quietest—and usually the oldest: not much under sixty perhaps. On pay days, each master of camels, and perhaps also of serving grown-up sons, was desired to appear personally, and to settle individually with the chief of the little staff himself.

. . . Ah, here my devoted squire brings my indestructible rifle, furbished afresh. These good reeds withstand the insinuating flint-dust better than our watches —out of about fifteen of these time-pieces a dozen were choked. Here are your invalids, N. [The gentleman roused from some other occupation had had time, while studying engineering, to pursue pathology and therapeutics in his "leisure hours." He found these acquirements useful during some cholera seasons in India, during which his neighbourhood—a populous district—was left without a physician—just as our desolate little party for, perhaps, seven months.]—There is work of a less general character. There is the improving, for greater safety and convenience, of the changing bulk of packages; there is the mending of pretty little holes in tents or carpets, to prevent their becoming picturesque nets, unfit to catch the weather or to cover the ground, but fit enough to capture some one's comfort, safety, or health.

Much inconvenience was due to the preserve manufacturers' labelling their tin pots all alike, whatever the contents. African and Indian servants, as a rule, are not instructed in Latin characters; therefore it would be more useful to print a picture or symbol of a raspberry, or a green pea, on a tin, than the English word for their contents. It were enough for a master to give out some bill of fare, without digging and studying for each ingredient.

Communism and Society.

As a matter of course each of us had his own instruments, his own provisions, pots and what not, and his own servant, singular or plural. As a matter of convenience, we pitched, several of us, whatever our number, in the same camp. But that we deliberately made a farrago of our households by making everything topsy-turvy to join in communism whenever engaged on the same bit of work, that cannot be accounted for either as a matter of necessity or of convenience. But we did it; and I can only try to explain this arrangement, or rather disarrangement, by supposing we expected to find compensation for the confusion in some indefinite *pleasure* arising from compulsory and unremitting company. As I think this antiquated arrangement rather general among that profession which is complimented on being the link-boy of material progress, I will timidly submit my random notes on the subject, made in bulk on the spot.

I can afford to speak with the more freedom, as our own little squaring counsel of four—which was our ordinary number—called itself, when out of obligatory harness, "a happy family." But I think this such exceptional good luck, that I should not recommend people of our—not very pure—caste, similar experiments. So far from almost naturally getting sick of each other, several of us found it, after our communistic trials, pleasant enough to join in parties of pleasure tours and excursions even in Europe. But I shudder to think what would have been that communism in camp with just a little less meekness of temper; a little more diversity in education, customs, manners, ages, tastes, prejudices. It must be remembered that we were, I

believe, all over thirty; that most of us had been long used to independent command over, and intricate transactions with, many sorts of people. Our likes and dislikes, and the style of associations we affected or shrunk from, were sure to be different and pretty firmly settled. There are only four male voices, I believe, yet four average men do not necessarily form a sweet quartet. As minds are more various than voices, the chance of random mental harmony is rarer than a random vocal one. We were no "pleasant community of saints" [Psalm cxxxiii.], no angels—fancy four bearded angels under a tent for a permanency!—but—I repeat,—being, fortunately, brought up under kindred home influences, we got on satisfactorily, and even pleasantly: only it was too much, too long, and we got a little tired of it. But I have read and heard of dreadful lives led in such jumbled camps. I read of one in which the members, who voluntarily joined household, were in the habit of having their meals in the common manger-tent at odd times, each man avoiding the company of the rest studiously and painfully. Of another, I was told the members of the staff agreed to make themselves hideous somewhere in central Australia or the interior of Patagonia, by dressing in swallow-tails and white chokers for dinner in the camp-tent. Military officers who are all right in service, would quarrel—often with deadly issue—in what is undisguisedly called the "mess." And so forth. Ingenious ways to recruit health, strength and spirits, forsooth!

In such gratuitous confusions every servant answers many masters . . . If the masters should not happen to agree, which is only natural, imagine what remains of the usefulness of each servant. Fortunately—besides our agreeing, for a wonder—there was a servant

in our camp who was worth five others; accordingly he was made major-domo, and saved much unnecessary trouble all round. I should think they had a similar rare fortune in the other camp. If this had not been, there would have arisen the ridiculous "necessity" of degrading one of the leaders to the office of butler and steward, in addition to his field-work, and his professional camp-work. Judging from what that would be in a camp like ours, at the pace we worked, I warrant that the member of the staff who was forced to volunteer for such "honorary" occupation would remember the term of post-collegiate fagging to the end of his days: but perhaps not long if such fagging—as is likely enough—prove the last faggot which breaks the too obliging camel's back. Though if such a human camel succumb, the clever vulgar would say the climate killed him. [You see, there are greater evils in the salt desert than the sun, which pounds wrinkles into your flesh and brands you with "crow's feet;" and there are worse effects than even that dry poison flow during which the ponderous water IN your Tantalus-throat and stomach is conjured into a mirage.]

The loss of time and unnecessary wear and tear are serious drawbacks even with men who agree as we did. You have to wait, or keep waiting, unsettled at meal-times. You linger together in empty chat after meals and other occasions, from sheer inertia, or whatever it is which keeps men imagining they are at leisure, pleased or pleasing as they linger together, instead of feeling free by themselves at home, and cheerful in some useful and pleasant occupation; or simply delighting in FREEDOM. The loitering mob was not large enough to appoint a policeman for urging us to move on. There was official communication, office-

work, study, or recreative reading done by some one or other, even during the common meals, but there would have been more of it, and worthier and easier, with more freedom through PRIVACY.

That the perversity of these unaccountable, yet, it seems, humanely fatal arrangements was always felt by every single member of both chief parties, was evident from its having been often discussed among us. As this arrangement may be a faint epigone of the shifting in Noah's Ark, and ordinary people accustomed to constraint will even *procure* it from sheer bad habits; so, if people once started this practice of indolently leaning against each other, they will cleave to this as to any other bad habit. It was for this reason that we "stuck together," incontinently, notwithstanding our liberal discussions. As Josephus repeatedly explains the emigrations of mankind, they were all sorely forced, though for everyone's evident good. It always needed the interference of the Almighty to wash people away from each other's hated backs. *Τοῦ δὲ Θεοῦ κελεύσαντος αὐτοῖς εἰς πολυανθρωπησίαν στέλλειν ἀποικίας,—ἵνα μὴ στασιάζοιεν πρὸς ἀλλήλους, κ. τ. λ.* And their glutinosity requires sometimes a whole deluge of waters, or of other epidemic confusions: for instance, the Heaven-provoking Babel of five daily editions of printed lies, imbecilities, inanities, and deliberate atrocities to sense and decency. These are likely soon enough to putrefy the language into several thieves' lingoes, to babelize literally. As I hear the angels of this debauchery and gambling speculation howl frantically into my study in a "quiet" part of this Babel for six hours daily, I am apt to ignore their small grain of good and think sometimes I hear the infernal alarm announcing the end of the world on fire.

O, what a penalty have I to pay during the months I live near the great library of Russell Square. And in the building itself, besides the ill-bred chattering of irrepressible boreal Teutons, the mighty skull-like cupola resounds droning through all seasons, from morn till eve, with wanton roars of foreign throats, making their toilet with bestial gusto. The evil-mannered neighing as of a Trojan horse, is fit enough for a circus, or even a museum; but not for the reading circus of this too hospitable museum. I speak for many, better and more tormented than I, or even some of you, resounding foreign readers, when I ask you to strike me a blow as hard as your pachydermous, plebeian fists may, and I will not wince. But do not, for decency's, if not for charity's sake, profane Thundering Jove by those door-bangs which shake and endanger the foundations of that glorious firmament in Bloomsbury. [A man, great part of whose duty is life-long humiliation in study, cannot help occasionally disturbing his quiet meditations by such flighty digressions as the preceding.]

"MEN are not meant to live together," said one of our party, in the quiet desert, summing up some remarks the rest had made on the subject. Let us join in war and work and council, and, sometimes in mirth, by all means. And I am happy to see how much success of all kinds is due to the general English custom of partnership in handicraft and trade, and executive science. Britons seem to have profited more than any other modern nation, by what Solomon and Homer have said of partnership: the one in Ecclesiastes, iv. 9, the other in Il. x. 222. O, for the inspiriting fife-and-drum sound of those five Greek lines! But even Pope, who has so much profited by those lines, is not likely to lag very far. So much for

rhyming work into play. But, if you are harnessed all day and many nights, as one of a high-spirited four-in-hand, don't you think it would do you good to be let loose on some hilly pasture to pick your own bit of grass? Or do you think that the harness, the drag, and yourselves would be the better if at night you were sent to browse the hills, and rest and play ayoke? But I have not thought of one thing. If some ingenious team were to hoist one of the four horses into the coachman's seat, to "guide" the other three in their rest, their food, and their play. This would *look* like order; how it would *act*, I cannot tell.

Partners in business do not, as a rule, make the same holiday tours together. Nor do I think it very common that bachelor partner brothers join household. Castor and Pollux are seen together chiefly in fits of greatest danger. Communistic Russians I have never heard commended for their supreme Graces of Sociability; but I rely on the *Quarterly Review* of some years back, explaining the precipitate ruin of those enlightened Communists, unrelieved and unredeemed even by the consolations of those graces—if the geographical distribution of these extend to the region of ice-bears. In those *Quarterly Reviews*, I read further about the Pilgrim Fathers: how they did better, and more successful work when each adult—with his family if he had any—lived separately, than while all were jumbled together. I think it natural that men, after having been salutarily flogged, and otherwise long tormented into something like liberal education, require, in manhood, as much freedom of leisure as the softly treated journeymen tailors, etc., born for lighter cares, obtained, in England, from their masters some centuries ago, to the benefit of all parties—as I

find at more length in Southey's "Common-place Book." Monastic life, as Voltaire reminds us—"quoi qu'on en dise"—is not a cheering or bracing existence, and many need further be reminded that men may for years live in the same convent, without so much as knowing each other. But there is no end of examples.

As with us, it was the desert was too small for our souls — gigantic chicks unfledged. It was an amphibious life—between at home and abroad. In certain regions only, between sunset and bed-time, it was thought convenient to use the common sitting-tent, and not to keep lights burning in each private tent; because the light was supposed to attract scorpions and snakes. But this indulgence in a convenience did not make us very much more cheerful than Laocoon snake-tied to his children. In fine, by having thus politely stiffened ourselves at the time for repose, we lost the best opportunities for recreation—which is delighting our minds with the refreshing plays of hospitality.

The tethers were occasionally loosened, after the two parties met in Dar-Foor. There was one grand feast in all ranks, on the day of meeting—profusely supplied with a variety of game. And as there were two boards at last, hospitality had some play; as much as the epidemic weariness and maladies contracted during the alarmed flight would allow. But our minority and captivity in the desert camps did not cease till we reached the navigable part of the Nile. There at last, on the barges, and later on the ships, we broke up into three triads—more free. And thus the blessed Nile had one more charm for the Anglo-Bedawins.

SUNDAYS.

I see I have, in this retrospect of our desert life, unconsciously been obeying the Architect of the Pons Asinorum, translated in part by Jeremy Taylor, where he enjoins self-examination at the decline of the day :—

Πῇ παρέβην ; τί δ' ἔρεξα ; τί μοι δέον οὐκ ἐτελέσθη;

I will conform to the last words of that rule :—

. . . χρηστὰ δὲ τέρπου·

" and rejoice in the good " [you may have done].

I am glad then, that though our Eastern little party had no play in camp to boast of, we kept true enough to our duties by observing Sunday. It happened, indeed, but once or twice that, on account of water, the day of weekly rest did not fall on the First day. Then we would conform to the Friday of our Moslem companions, or the literal Sabbath of our Christian Egyptians or Abyssinians, or the Monday of other African nations.

Whatever the intervals between watering of camels, it has been proved that these animals require a day or two's rest from labour every week, as if in compromise with the two kinds of nations they live between :—some of the negro tribes have fifth-day sabbaths, as the Ancient Egyptians had after their original seventh day's divisions and seventh day's cross-buns, before the times of Moses.

With all our natural ardour to be off these places before the unreliable season sets in, one felt worked out by the week's end. . . . I wonder what percentage of misery and breaks-down amongst explorers and other workers in distant countries might be traced to their

wilful transgression of a certain law. It is not al
easy to ascertain this as an isolated reason; be
the offenders usually accelerate their fates by
faults and mental infirmities, for vices generally
together for mischief.

These pretty, orderly, quiet camps on Sundays
serene sights. Every one looked rejuvenated, an
soldiers were "endimanchés" in their red caps, white
form, with *repoussé* brass buttons, and with high
gaiters. It is a pity people cannot look, even if
would, endimanchés [don't make an English word
funny, dear young England, unless they were to carr
coloured umbrellas for the day. And if we were to
the original sunny Italian to express the object, etyı
gists might be delighted to explain ὄμβρος by "d
pour." But the hideous sight of about seven inch
white gaiters—as worn in chilly, or, at any rate, c
London, by many strange looking people on a Sund
is not exhilarating: a sleepy eye is violently sta
by such lengths of cuffs and collars, worn at the w
end.

On ourselves it was remarkable what a blessed
this Sunday's rest used to have. We felt not on
body like rising convalescents—finding even the
air less chafing; but we even recovered from bei
little sick of each other. I don't know whether Su
would have done so much good to some random
of people, envious, domineering, perpetually plod
to be witty, and five hundred other clever vulgar
and hard-up specialities. Nor do I think their vic
enviable, who would be thus more fatigued by rest
work. But it is only natural to imagine speedy
full recovery in a party where conceited "juniors"
abashed by being treated throughout almost like

valescent spoilt girls by their "seniors." The conversation of people who were long trained for general observation on five continents, and for particular observation of their own insignificance in metropoles, could never be very dull or very boring; and a moderate amount of playful "chaff" all round kept the spirits of the exceptional little party in excellent health. But as our full-taxed nerves were recovering—remember we were racing in good earnest all those nine or ten months—we appeared on Sundays, somehow, fresh, if not amiable, to each other.

We had no Divine service, though of the same persuasion, any more than we said loud grace at table, like poor Lucas did. It would have done us good. But the reading—I believe generally—was suited to the Day: it was, however, not what seems the universal Sunday reading in English towns. That is, it was not those newspapers—I judge from three specimens—with contents answering to the nature of their hawkers' day-long Dominical yells. These acoustic burglars—by the rod!—become even hierosylious, breaking into the very chapels and churches, and that during service! . . . . . In the different tents such little things may have made their appearance—and perhaps passed into other tents—as an odd volume of Tillotson, gleanings from older divines, a French volume from a collection of classic preachers, a translation of the Korân, a *Quarterly Review* with a criticism on Strauss. Here is a living Bishop's Integration of Differential Sins. The differentiation is good, but might have been done by a lesser man or woman; the integration—well, I should not like to see my own masterly integrated. There goes one differential, in this very act of snarling at my betters. I am just as infected as the lowest populace,

and I was only reflecting like a slave some sneer in the *Saturday Review*, to the reading of which paper I am during some seasons blameably addicted: no, this was said before that sneer was committed. Nevertheless, hear me recant. Mea culpâ! I remember having been so fond of the little railway volume that I hugged perhaps a fourth part of it in affectionate pencil brackets, and read the contents over again. If my nature is still so wild that a snarl *will* break out even on a Sunday, fitter objects for it are the spiritual amateurs and quacks, I mean Reverend mountebanks, who make the church pay by preaching in thieves' gibberish, and profaning the temple with the speculative facetiousness of trans-Atlantic papers. This is worse than the licensed adulterators scourged out of the Temple at Jerusalem; these priests are themselves the gamblers in the church.

The Bedawins say the desert is haunted. Ἄπαγε. . . Here are some shreds of Pascal's Pensées. Here are some translations of Zschokke's, whose short novels a beloved friend used to be fond of. These translations are from that author's "Stunden der Andacht" (Hours of Meditation), published with the permission of Her Most Gracious Majesty Queen Victoria. There are pencil notes in it, dated—some one had adorned the fine essays with his mother's beautiful comments, as the two were, it appears, reading together during odd hours in the week. Those mothers have a blessed habit of finding out a pore or two in the most packed of portmanteaux for sustained education. I am sure on these days they are wondering whether our hands are brushing the desert dust off these opened pages. Nay, I should not wonder if some of them would feel as if they really saw us; and could tell some marked turn in our mood, unexpected and hardly accounted for though it feel even to

ourselves. Such visions in this wilderness we are incapable of; but we can see those Mothers distinctly in our minds. We imagine them now, pensively looking down on the ground, as if into it or through it, perhaps just a certain way and a certain angle. O, that pensive, yet clearly eloquent, dear, sad look with which they sometimes mourned over our more tenacious faults and our sufferings through them.

Sometimes a talk would arise in tent on kindred topics, beginning, perhaps, with a series of authentic anecdotes, and resulting in some curious parallel between the French physicist's [Voltaire's] shrewd guesses into the future, and the French mathematician's [Pascal's] reasoning on what he calls certainties other than those which can be proved by geometry; and between De Quincey's fine logical acumen in his essay "On the Knocking at the Gate in 'Macbeth.'" As a fillip for those unacquainted with other of De Quincey's writings than the more sensational ones, I will quote a little from my last Sunday copy-book "to exhort the reader never to pay any attention to his understanding . . . . . the meanest faculty in the human mind . . . . . when it stands in opposition to any other faculty of his mind . . . . . which [mere understanding] may do for ordinary life, but not for philosophical purposes." . . . . . Then he proceeds to explain, illustrate, and prove his point, with delightful lucidity, by homely facts in physiology, and descriptive geometry.

How fresh this small Cambridge Septuagint of 1665 reads! Owing to paper, binding, and management, its leaves radiate, when open, like the rising sun, for an emblem of that world which we half see, half construe by reflection. How beautiful this type with

the ornamental abbreviations, and artistic variations of letters, so grateful to my eyes tired by packing and so forth! How fresh the chapters about the Hebrews in these deserts read! How strange that the very beginning of the New Book, Matth. ii. 15, *ἵνα πληρωθῇ τὸ ῥηθὲν ὑπὸ τοῦ Κυρίου διὰ τοῦ προφήτου, λέγοντος, Ἐξ Αἰγύπτου ἐκάλεσα τὸν υἱόν μου*—should never have struck me before I began studying to love Egypt.

It is a pity there is yet no series of insinuating pocket editions of the classic doctors: 16mos, with separate volumes of modern, matter-of-fact notes to each of the more voluminous of them. But it does not perhaps matter very much, as those among the long-trained who do honour their Fathers, are rather fond of copying them, as of old. There is a recent manuscript tomelet with spoils from Patrological folios, such as scholiæ and commentaries on the Psalms, Gospels, etc., with quotations from Leibnitz, Kant, and whom not. That tomelet contains a hymn, with those beautiful passages about the Libyan desert, from the ostrich-hunting Squire-Bishop of Ptolemais. Hear the music of the start:

Ἄγε μοι ψυχά
ἱεροῖς ὕμνοις
ἐπιβαλλόμενα,
ὑληγενέας
εὔνασον οἴστρους·
. . . . . .

Then it aspires, like some sparkling sand-spout, to the height of over seven hundred lines . . . Let us see. "Come along, my soul." That won't do. Smooth enough to me as to metre, but rather rough as to sense: as if the Greek were *ἴθι δή*. Try again to make someone "delight in a new song;" or, at least, try to be one of those who obey the call of *Ψάλατε συνετῶς* (Psalm

xlvii. 7), to quote from the Egyptian version. I give the following risky attempt to reproduce both sense and metre:—

Wave care and prostrate
The goading desires
Of festering matter:
And arise, my life,
To aspire in a hymn.
. . . . . .

But how far from the sense and music of the original! It forces me to try a really new one, though infirm in infancy.

Let me loosen the clasp
Of my carnal case;
That the magnet, my soul,
May point to its Pole.
. . . . . .

Weak! But who is that modern . . . I know only one modern Master of English who "clearly sounds the true ring of the patristic hymn": he who speaks:—

But fallen man—the creature of a day—
Skills not that love to trace.
It needs, to tell the triumph Thou hast wrought,
An Angel's deathless fire, an Angel's reach of thought.
. . . . . .

(Cardinal Newman it is.) But that strain of Gerontius disturbs awful memories which must sleep. Therefore I return to my Synesius once more, and learn the hymn by heart.

BOOK III.

THE CARAVAN.

IDOL BREAKING.

An Essay on the Treatment of the Camel in Science, Art, and Literature.

Before launching your "ship of the desert" amidst my fleet you must allow me to do, as well as I may, some carpentering for you; else your camel, or "ship," will not hold water through the following chapters: nor would the others support all the merchandize I have ready to load them with. I must destroy before building, as I destroyed before the start from Wady-Halfa the continental packages in order to repack them more properly. I want to keep you serene at a pleasant elevation. I have said to myself: "How could I hope to spread the carpet of enjoyment? and in what manner could I carry off the ball of hilarity from the plain of mirth with the bat of pleasure?"* Because of my caravan "my shepherd tongue is fain to keep some part in fold."† I respect you too much to interrupt what I intend for your enjoyment, by fitful descants, with savage ejaculations, for the sake of repeated adjustments. Bear, therefore, with me while, in an unartistically garrulous style, venting what you may call my ill-nature, in this trailing, spasmodic chapter. I cannot help the ugliness of these collective growls, and what may seem the

* From the translation by Eastwick, F.R.S., of Pilpay's Fables.

† . . . . . τὰ μὲν ἀμετέρα
Γλῶσσα ποιμαίνειν ἐθέλει.—Pindar.

weariness of inane roars, any more than the assembling caravan can preparatory to starting.

Some of those true readers who are often disposed to adjust their opinions and correct their judgment, must have been puzzled by certain incidental expressions in travellers ranking as high as Lady Ann Blunt, Bonomi (who made statues in their likeness and called his sweet house in England "The Camel,") Sir Austin Layard, Sir T. Douglas Forsyth, etc. Those readers are surprised to hear these travellers call camels beautiful. Yet, I have asked myself, why should they be surprised? I have worked out the answer. People's simple notions about these animals have been mystified and corrupted from their infancy.

Children are not particular about the artistic fidelity of their toy, or picture-camels, or about the sense, truth, and point of their ditties or stories. Yet I see that the more careful of British workers for children make it a point of conscience to be true and pure. If even the most devoted fail in their labour, which is often a labour of love, and present hideous idols and absurd ideas instead of true images and just notions, it is the fault of those responsible for the standard models and canons.

The camel, as represented by savants and artists, is *one* corpus delicti of that fault. The work of the untaught artizans is approved and worshipped (or insulted) in antediluvian rites by the high and low priests of contemporary Science. The result is epidemic loathing of idols and rites. What is that epidemic, how did it all originate, and why has it been allowed by the intellectual police to spread so far into this intensely enlightened century?

The descriptions [un-modern, because intolerant and

spiteful], with the ill-bred epithets bestowed on the camel, even by the latest of high authorities, are worthily interlocked with illustrations untrue because scandalously unartistic. Both descriptions and illustrations appear as bigoted as the imbecile vituperations of mediæval travellers on alien religions: though the practice of such abuse has been exposed since St. Paul's letters. Those bigots were blind to the unity in relationship of all creeds, because offensively ignoring the spirit of their own. The others—the modern savants and artists—uninstructed in the very principles of Art obligatory upon them, have yet not been able to see, *first*:—that all species and typical varieties were created beautiful, and that æsthetic rank is a question exclusively between well-understood individuals of the same species and variety; *secondly*:—that animals have to be represented honestly, in the true spirit of those civilized nations which have been most familiar with them. To make a short catalogue of more familiar names: is it worthy of a Baron Cuvier, a Quatrefages, a D'Orbigny, a Barthélemy and a Géoffroy de Saint-Hilaire, a Sir W. Jardine, to *criticize*, as they do, the ALMIGHTY, for what Oriental classics call the Wonder of Creation, the Beauty of Nature, and HIS pre-Adamite masterpiece? "Ugly, hideous, repulsive, ill-natured, spiteful, treacherous, awkward, ungainly, graceless, ridiculous, disproportionate, ill-adapted for performing its work in nature" [say shorter "misdesigned"]—these and scores of such stereotype ravings are meant for the exponents of the expected refreshing enthusiasm from men of Science: who contribute to beatify the world, by beautifying a natural object in the same ratio as they have learnt to love it through

admirable beauty of the animal's structure. But they would, with bad grace, advance these virtues as a sort of excuse, apology or compensation for all the lacerating horrors of its unspeakable appearance and "manners" and "vices." The form, appearance, and deportment of some high-born young woman of the Levant may not be much known to *men* of Trojan and Scythian origin; but some of these men, as well as their female cousins, have given us pretty trustworthy accounts of Circassian, Georgian, and similar women. And if those authorities in Science who invoke poets to their aid would condescend to notice that, in the most rapturous of classical lyrics, the dazzling fairies, with their refined tastes, find it a high gratification to be compared in a thousand ways to the camel—to be called "my camel" as other people would, I believe, say, "my dove," and so forth—we might have worthier descriptions of the animal than the gossip, and worse, with which we have been favoured till now.

If, then, the high-priests of Science behave in such indecorous ways, what can you expect of the minor brotherhood of extractors, ταριχευτῆρες,* compilers and teachers who look up to them? You can certainly not expect intellectual conquests and æsthetic reforms from those communicative lay-brothers who volunteer to amuse the world by lollypop anecdotes of first tourist impressions. Among the first class of compilers you would meet such strangely vulgar creatures as a professional clergyman, who, in a book intended to illustrate the Holy Bible, assumes, like many of his Yankee-taught Reverend brethren, the voice of the street-Punch. He introduces the venerable father of the Hebrew vice-pharaoh on a cameline

* The embalmers of Egypt, an inferior order of the priesthood.

Rosinante, intended for an ideal noble type, and illustrated by wooden looking woodcuts in imitation of the exuberant Charles Lever's guy camel. Among the other class of men—raving dervishes who go on a short trip with the ominously set purpose of editing some scrap-book—you may come across the worst: which is one of those ill-bred moderns who offend against Reverence in another way. With all the pomp and semblance of authority such an one is impertinent enough to call the richest monument of devoted scholarship about the camel, "empty," or "useless," or what not. But a man, who comes from a rough and raw country to teach a highly civilized, and—in a sense—antique nation their own language, is likely enough to remain stupid before such a feast of knowledge, and such a stimulus for further investigation as the glory of the Baron Dr. Hammer-Purgstall.* Possibly the monography of the camel, containing chiefly cuttings from inferior daily papers on miscellaneous subjects, and the learned and refined correspondence between an errand-boy and a shoemaker's apprentice about the justice of street urchins legislating for their masters; all this may be more instructive about the camel than the mighty labours of the veteran Baron and his future followers. My own slow and awkward mind could construe this mud-pie, losing even its little form by being thrown into the face of a marble statue, into something resembling the camel only by making me think of one of the camels in Babrius.†

* "Das Kameel" in two volumes of the "Denkschriften der Kaiserlichen Akademie der Wissenschaften in Wien."

† *Διέβαινε ποταμὸν ὀξὺν ὄντα τῷ ῥείθρῳ κυρτὴ κάμηλος, εἶτ' ἔχεζε. Τοῦ δ ὄνθου φθάνοντος αὐτὴν, εἶπεν· "Ἦ κακῶς πωάττω· ἔμπροσθεν ἤδη μου τὰ γ' ὄπισθέν μου βαίνει." Πόλιν ἄν τις εἴποι τὸν λόγον τοῦ Αἰσώπου, ἧς ἔσχατοι κρατοῦσιν ἀντὶ τῶν πρώτων.*

Whatever it may have been worth in the estimate of an enterprising itch-finger who needs must write a whole book in a fortnight on a subject somewhere just popular, the labours of the Styrian Baron were to me a balm. As I desired to present some friends infinitely superior to myself with some packed essay about what pleased me most in the desert, *i.e.* the caravan, my first thoughts were naturally turned towards a hunt for Arabic authorities. The hunt after those sources of information in London was like pursuing in the desert an underground river (*Bahr-takht-el-ard*). The cupola of the great Beehive in Bloomsbury did not contain even the Zoological Dictionary of El-Damîri. . . . The worry about this, and the rest of the immortal "Camel Stallions" (classics) was enough to spasmodize my after-midnight rest. Fortunately for myself, I wanted also to bother that Royal Fellow, Dr. Günther, about those camel skeletons still stowed away in the boxes of the Museum. In order to get rid of me for good, the excellent Doctor presented me with a magical sheet which was both map and conveying carpet [like that in the Arabian Nights Entertainments]. That wonderful carpet from the laboratory of the indefatigable Zoologist,—who dissects, stuffs, and classifies, not only beasts but even their dissectors, stuffers and classifiers—took me first of all to those domains of the hospitable and generous Baron, where my fluttered soul found rest for a time.

Besides the renowned Styrian Baron, I have found only one of the men of science under review who had treated the camel in an intelligent way: but then, this man is no less an authority (and, paradoxically, for this reason, unstudied by these authors and artists) than Professor Owen. He appreciates, with the judgment

of a conscientious and calmly observing studen
beauty of the animal, and describes its movemei
graceful. But singular to relate, he allowed the a
—in one of his masterpieces on Anatomy—to be
llustrated by a contradictory woodcut.

This brings us from the priests to the idol
artists, and the artizans. And as we rehearsed,
device or battle-cry, before the priests of Science
canons of their vocation, so we will emboss our
with the cameo of the brutalized Cinderella of Z
and Art, before using that shield in our icono
indignation.

And thus I cut the symbolical cameo. Take a
tal U. Put it upside down. This will serve, on thi
scale, as a side view of the camel's back, legs, an
Take one wing of a capital Ψ. Stick this on, in it
nary position, to one of the two points on the out
the inverted U, like a horn, just where the curve
to turn. You see, it is the camel's little, and
level head, sharp set on its thin neck. Close th
by a line, starting a little below the junction. L
line be higher at its end, to join the roof of the ir
U, a trifle above the point where the curve me
straight part of the opposite leg of the U. Th
may be baggy, say, like an ascending chain, son
drawn out. If you want your camel to appear mo
bisect longitudinally another U, and join the p
bisection to the analogous point of the wing of
previously fixed, like an exalted capital J. Th
vertical line would appear to you rather high fo
ting man; but remember the thick saddle is high
the camel's spine. If you operate with a U
size of your finger-nail, you might split th

which has stood for the hind legs, split it from between belly and back-line. In this larger scale the narrow and pointed merrithought of the legs will appear bent a bit, say both legs with the concave turned inwards. These legs should seem joined close at the top, and the feet may stand as wide apart as the small U. The fore-legs will still appear straight and close, but thicker than the inverted letter shows them. The tail, this pendulum—whose size agrees with the latitude I suppose—might be made to appear, in its extreme moment to the right, tangential to the cap of the inverted U, and to reach half-way down.

Now this simple alphabet has evidently appeared too lettered for our tender artists as yet. But I trust the "Great reader" has taken notice of it with a good will as encouraging as if the diagram had been put together from the complete tender parts of a little flower. Indeed the simplicity of a camel's fundamental structure is so clear and unique, that it raises this tall animal to a position in zoology which should be marked by the distinction of a separate order. Let this, however, not mislead the interested artist. This magic simplicity tends to an astonishing combination of mechanism: just as the simplest of keys opens the most ingenious of locks; or as the minute elements of the simplest of calculi—the differential—reveals to the astronomer an universe of solutions, charming by their grandeur.

Let the reader observe the extent of poetic licence, if told that the chain-line of the neck combined with the back contour, is a wave line. Seen to the face, or from the rear, and enveloped in dust and mirage, the tall narrow animal when mounted, reminds me often of an upright fountain with contours like those in Trafalgar Square. But the uppermost line of the whole cameline

profile, when seen well and near, is the image of a deep and narrow river-bed's cross view, at a bend, with an island. The little depression in the top-line of the head may stand for the tow-path. The water-pumping neck, the contours of which first plunge down sharp, somewhat like a cataract, is well miraged in the profile of the shore, washed abrupt. As close to the steep shore the curve of the narrow channel follows, breaking at the false shore of the island, so the pitch of the neck recoils, and, rebounding, stops at the obtuse edge of the shoulder. And as, a little further from the gentle elevation of the bed, up rises the contour of the island; so, from the gentle slope of the first part of the back, the hump is reared.

In the humpless varieties, and the hump-lost condition of this back-bitten animal, the dorsal profile is similar to that of a stooping man—say, in the attitude of a discobolus: while the average type of the humped dorsal profile redounds in the chaste contour of a recumbent nymph's chest. There are humps as high and long as to make the camel's back resemble that of a cat in anger. But in the generality of cameline humps I cannot see any such startling anomalies with reference to other animals, as are usually depicted. Without referring to other of the many animals emphatically humped, I will only remind the reader of the humped cattle of the tropics—as flourishing on our ruby match boxes—and of the yak of Tartary. With the first animals the excrescence is certainly much more abrupt than with the camel: moreover the backs of the former have no preparatory bend. But, after having remembered the contour of a man's back, we may as well glance over the backs of the whole animal kingdom: from monkeys and lions, down through insects to the

mollusks—to see that most animals' backs are vaulted. How would a modern Aristotle have them? If the authors under review must particularise the back of the camel more strongly than the backs of other beasts, it would be fair to note that, in countries excelling others by the variety of their animals, the camel's neck- and back-contours are selected as models for the single- or double-domed awnings over sedan-chairs, bullock-cars, elephants, etc. One of these contours is "the line of grace and beauty" pure and simple.

An outward point far more remarkable about the camel than the shape of its back, however, is the admirable mechanism of its legs. The exceptionally small number and the exceptionally wide and efficient play of its joints, reminds us essentially of the greater unity through greater simpleness, of the human mechanism. Great is, for instance, the free play of the knees and thighs, half the latter of which only touch the reduced abdomen, but are not grown to it at all, as is represented on many a valued modern drawing on steel and copper: representing hymned "master-pieces" in famous galleries. The beautifully refined structure of these joints alone imparts to the camel's attitudes more than double the variety of that which any other quadruped is capable of. A great distinction appears even before the beast rises. While sitting, it does not show its feet—which unobtrusiveness suggests to me the idea of refinement. When my animal friend thus sits and reposes, chiefly on its literal pedestal, it impresses me with an airiness and willingness to fly up, such as no other quadruped does. As the armies of a certain nation—otherwise generally believed to consist of disagreeable monsters—are known by not knowing when they are beaten, so a true camel—considered hitherto

a disagreeable monster—never knows when it is dead-beat. But while the enemies of such armies may know better, the rider of the camel may not. The rider also feels less fatigued on a good riding camel than he would on the best horse: even if he should not avail himself of the superior facility to change attitude on a proper camel saddle. And should he study to manage such a camel better, fatigue would be altogether dissolved, and would change into a sweet passion unimagined by the most enthusiastic of equestrians. The change of the rider's sensations is caused by the great variety of his camel's paces—a variety unequalled among quadrupeds, and surpassed only by the variety exhibited by consummate ballet-dancers. This rich variety of sensations would compare with that experienced on horseback, as some great opera compares with a homely song in equal stanzas. But what an opera becomes in the hands of itinerant London instruments—animate or otherwise—that the camel has become in modern Art, Science, and Literature.

Anybody who looked attentively, and not irrevocably prejudiced, at the caravan on the grounds of the Alexandra Palace, in 1877, will soon admit the beauty of the outlines, particulars, and movements of camels. People saw there that these animals can please, and can delight in being petted as well as other animals. It often did me good to see the splendid brutes played with, and to hear children call them pretty names; to hear the adults, in amusing and agreeable surprise, say that they never thought before that these animals were really beautiful. There were reserved, and puzzled, and careless remarks, too, of course; but I heard not a single exclamation of dislike. Imagining you so far persuaded, let me try to entice you further. Fancy

yourself in the desert, and provided with a fair specimen of a young riding camel. If not scalded and dead-beat, and knowing you know and favour her, she will come or run up to you while you are sitting. There is more variety of expression in that little head than in that of any other animal except man. An artistic physiologist, familiar with the habits of these animals, could easily explain this. There are those full, rich, ghazel-like hazel eyes, deliciously shaded, like deep purple centifoils by bent leaves, or as the bronze bust of a Queen Candace by a split laced frill. Sit by me and see her come. Put away that book else she will take it from you; and box, pat, and feed her as she comes to brush your shoulder with her lips. The lips are shifting as if in chat, while she looks inquisitive, kissing your hand, and —if you let her—rubbing cheeks with you. It may be cupboard love, because she tries to search your pockets. But, judging from the expression and movements, she would much rather play than feed. Now she has got the better of you, running away with your weapon for a delicacy: you see how terrible a camel is as an enemy; but you must not let her eat that vegetable fly-brush. Don't run after: call her back. Sit down. "Ghazelone!" There she comes from the opposite side—now looking down at you in the face from behind your back. "Ghazelone, I am ashamed of you: had you mangled or eaten that fly-brush, the flies would have eaten you." . . . . . Off again. . . . . What an admirable play of structure! I cannot notice often enough the joyous mobility of that jewel of a head—like the reflected image of a pretty southern pleasure-boat dancing on the billows. That spring hidden in the exquisitely moulded neck is more powerful and pliant than the finest steel springs. When during walking the neck is shifting—gently

stretching, bending, contracting—it seems to flow liquid on account of its sinewy corrugations. And notice that wonderful body in movement, with the dip of the bulky chest like that of a swimming bird. Look at its back motion: it is the crowned top of an advancing wave: now look at the lower contour; it is the whirling bottom of the wave. As you pursue it in this order, the latter seems to flow from under the former. The remarkably constructed legs, too, impress me as if they served for more purposes than mere walking or running: in the liquid sand, two feet would sometimes appear to move like feet of swimming birds; while two legs and feet would apparently shift in the manner of wings. The whole mechanism, watched for a life-time, would show an inexhaustible variety. The interest in their appearance is still enhanced by noticing the great variety of skin-texture; the charming gradations of its colours, seen under the surprising changes of desert light, and through the delightfully mobile desert atmosphere.

And now see what the artists have made of all this mine of wealth to illustrate our Bibles.

Our greatest admiration is due to a living artist—Mr. E. Walton—for the nearly one hundred lithographs, engraven by his own devoted hands, and published in a large folio.* Mistrusting my enthusiasm about this long labour of love, I referred to the criticism in the *Athenæum*, where I found the exemplary monument appreciated in the highest degree. Then, this painter's unparalleled caravan in water-colours keeps on folding in ever fresh groups into his annual caravanserai of the Burlington Gallery. But, though I am glad to see that his

* "The Camel; its Anatomy, Paces, Proportions," &c., 1865, Day and Son.

splendid Northern landscapes are so popular, I wish he would exclusively paint Eastern subjects. More deserts, more camels from that brush, more! Ever more!

It is like an unprepared-for shower to turn to the next shop. However, the large folio plates of Mr. Waterhouse Hawkins, in his "Comparative View of the Human and Animal Frame," "are on the move in a right direction"—though they are by no means correct in details either anatomical or physiological. This right direction is towards a desirable meeting-point of Art and Science. The attempt will answer the general purpose—of pleasantly, that is, superficially instructing—for which they have been pretty showily executed: and with much, but not enough care. The most I can say for it is that they seem a hopeful struggle against a protracted stupefying dream. What, however, may well please and a little instruct the general spectator, should be enough neither for the zoologist nor—who should be his ever present comrade-at-arms—the artist. Both castes must, furthermore, be well prepared, and then study nature, and observe, and dissect. Let them be as clever at least as average English boys are, inquisitively pulling interesting objects to pieces . . . . And then let them proceed to the perfection of a schoolboy: and measure, and balance, and put together—PARSE the animals before they venture their supposed talents into artistic compositions. Let us have no more of that ungrammatical rubbish with which men like Mr. Gustave Doré—whatever his blandishments in general—or Horace Vernet—whatever the showy stress on a poor couple of points—have flooded the public with.

Whatever the manners and whatever the methods, and the length and depth of their studies, Mr. Rudolf Huber, and Mr. Carl Haag, are much superior on their

camels to the celebrated Frenchmen. Indeed it would be insulting the pains-taking labour of these Germans if we compared in detail; as these Germans are as good in their kind as Sir Charles Eastlake was with his camels. There is a group of the latter's in the National Gallery, "Lord Byron's dream." The camels on David Roberts' Oriental sketches are outlined with some vigour, and show much in a little that is characteristic enough; though it is somewhat annoying to find the same attitudes and even the same groups amidst different surroundings—off-hand manufactory. The only commendable educational lithographs of camels for students of drawing, I found signed something like Lalailles. All the other paragons for drawing classes I saw were outrageously absurd.

Among sculptors, I give, under my present lights, the first place to the eminent Mr. Dubucand. The bronze, a couple of feet long, represents a glorious Bedawin on a running camel, pursued by a dog or two: its companion statue is a group with another splendid Arab on horseback, overtaking an ostrich. Mr. W. Theed's noble camel, in the group "Africa," is too well known from the Albert Memorial, from a cast in the Crystal Palace, and from photographs and prints in all sizes. It is slightly idealized, as is, no doubt, proper, and that may account for its looking just a little unfinished. It is less sinewy and sleeker, perhaps, than a true desert camel, and looks like one used to rich pasture, stabling, and short journeys near rivers; and *this* impression may have been intended by the veteran artist.—In Mr. Guillemin's bronzes, the shape and setting of the head, and the setting of the hind legs, do not look natural and powerful as the rest of the body does. Mr. Clesinger has also produced lately some pretty

bronzes, in the shape of sitting camels, to serve as low candlesticks. Tolerably studied and chiseled as they are, there is perhaps too much artistic license taken about both shape and attitude.

But what is the number of these scattered works among avalanches of abuses of art, incessant from the alliteratious facility of modern engraving. The glib tongues of insinuating paper keep on smuggling these slanders, to cheat even this nation and this generation with the art of drawing universalized.

A great cause of this production of inferior art is, that even art-critics in high consideration have, while pronouncing on pictures of camels, not yet made the discovery that these animals of all quadrupeds are the most laborious and difficult to master for a painter. This may be inferred even from my defective description of their many extraordinary points. Nay, some of these authorities would, like children, affirm that this animal is the most easy of all to paint! If a clever colourer paints them a camel's coat, these learned judges are delighted. Thus is the bad case literally palliated.

The sketches of camels from nature, constantly being sent in avalanches to illustrated newspapers, and such like are most likely spoilt in the process of engraving. The madly urged engraver, who is left no time to perfect himself in drawing, will "correct" and complete these hasty sketches—done from under fire possibly, and by amateurs to an alarming extent; and the engravers' norms are evidently mediæval, prehistoric, or "natural-historic."

It is obviously easy to trace the parthenogenesis of the moths darkening truth and damaging canvas and paper; for such are these norms and models. In many of our recent engravings representing camels in nature,

I recognize the traits of Asiatic, old French, and other bronzes. On other new engravings and modern pictures I recognize the traits of new ivory chessmen (camel riders) made not far from London, in imitation of ancient monstrous Mogul originals in ivory, agate, hæmatite, basalt, wood, clay, silver, and gold. Along a branch of the pedigree, the head is that of an Ornithorhinchus; the neck, that of some mythical dragon; body and legs of no animal in particular—unless some be of the pistrix and others of the cockatrice. The prehistoric sculpture on a mammoth's tooth, a relief on the Palazzo Camello in Venice, the coat-of-arms of the Kracher family; the flood of mediæval tapestries in different European palaces; and mediæval paintings of all schools —all these and more flourish still (though the Krachers themselves be extinct), with many of their descendants, and threaten to continue their features for some time into the next century in a pouring host of images.

The conspicuous camel on the left pylone of Denderah, and other hieroglyphic camels less like camels, the line of the early Mogul monsters—not intermarried of course, but interparticipating and intermarred with amateur-made porcelain bric-à-brac—has resulted of late in endless multitudes of Palimphœnician novelties, agreeable to the Palimphœnician taste of the age: an interminable brood of compromise atrocities. They are forged of some shiny compromise metal which keeps flowing from under the juicy euphorbium dome of some arctic Stygian atmosphere. The worshipped firm of nobly-risen millionaires has taken a fancy, violent and insatiable, to the camel of our hearts, of our Bibles. Loftier, showier, more brilliant even than the flaming gin-palaces of England, are their innumerable shops in London, and probably in the daughters of this Garga-

melle of metropoles. In these places the easy Moloch of popular taste is supplied with all sorts of manufactured hardware camels, turned out every season by the myriad, for the use and adornment of the presentation-, banquet-, dinner-, writing-, and drawingroom-table, chimney-piece top, etagère, and what not. Against the general designs of the lofty flower and fruit stands or memorial monuments in "silver" and so forth, I say nothing: and the camel, among its caravan of virtues, accommodates itself to an endless variety of decorations. But the execution of these engine-factured endless caravans in metal—Art by Steam!—is dreadful. The one transversal scroll for both ears, baked on to the roll of the head, which, with unparted lips, ends in a well-rounded milk-, egg-, soup-, or sauce-spoon, may make such a cameline ornament very suitable for "the million's" breakfast-tables; but . . . . we will not further detai{l/n} lest we whisk off in a sandspout about taste, arts, and graces in manufacturing towns, and among the legions of after-educated millionaires.

Glance at another branch of the virgin pedigree. The family likeness distorted my own wretched features as I grinned the grin of recognition we bestow on certain old acquaintances, or on the news of new feats of our old black sheep, private or public. The paternoster works* of Paternoster Row incessantly turn out images of this animated "watering-wheel"! I am startled every month by a "new" model, a "new" paragon, a "new" norm on new paper, with new colours, in new sizes, with new and charmed advertising criticisms; the old abominations in new distortions, new showiness, for schools, academies, and universities; for the nursery

* [A Germanism.] Chain wheel with buckets.

or the library and laboratory of the scholar and the artist. The novelty of this prolific branch consists in fixing its origin on to two or three such phenomenal pictures of the camel which were at one time supposed to be drawn—*mirabile dictu!*—"after nature." Just fancy! D'ye hear, good Public? Is that not a fetching advertisement? . . . No, not *you*, dear classic soul! do not ask by *whom*; maybe by a cat: let it suffice they were drawn from "nature" in a glass case. The idea is a modern one. I do not think its birth had anything to do with facilities of travel. There were camels used in Central and Northern Europe, even in France in Christian times; there have been roaming Trojans all over Europe with show camels to this day; there have been camels reared in open and handy Tuscany for these two centuries, and in Granada since olden times to this day. No, the idea was an inspiration. Baron Cuvier, I think, was the first—because I am not sure about Count Buffon—who hired some one for the work. I believe the contractor was some ubiquitous German, who was no good at an obscurer trade. Among the learned Baron's sumptuous folios, then, appears the first execrable daubs, labelled camel and dromedary, which beg excuse for their existence by being advertised "after nature." The process of *engraving* seems to have been entrusted to some other never-improving adventurer. This, then, with a head like a pig's—not to detail further—is the ancestor, still in full productive vigour, of "illustrations" of all classes of work, the highest class scientific and artistic included. It has been reproduced to all scales—or rather away from all scale; sometimes turned, as a jaunty novelty, the other way, thanks to the additional labour of love of tracing some descendant through the window. In some instances the lineal descendant is

much improved; some admirers or loathers have generously put more "blooming fat"—*τεθαλυῖαν ἀλοιφήν*—on all parts than was ever seen on certain parts of a guest-camel or marriage-camel forcibly crammed with dumplings. As these blots are produced *invita Minerva*, it is perhaps as well to make them appear wrapped in wool like that abomination which became the monster Erichthonius.

If, for the most serious, and most productive purposes of which zoology is capable, men of Science think fit to call in the assistance of the lowest class of adventurers to illustrate their best work; if living flowers and living animals are to be treated like maps and plans with pantographs or eiconographs, or, like some unicum of an historic signature; it would be perhaps as well to see to the accumulating distortions in those models for students, "creative" artists and engravers, by now and again letting some of these hirelings have a look at nature itself. I should recommend setting some of these fellows "from a university" to take fresh measures from some new abortion in nature.

I have found the enlarging into pretentious sheets, ten- or twenty-fold, some very inferior engraving representing objects which are themselves ready to hand, fashionable with the map manufacturers of Paternoster Row and their German personnel.* These counterfeits are intended for schoolroom illustration, and "object lessons" [nice distinction !] in places where promiscuous adults without any object are treated to facetious Bashi-Bazook lectures of sweet-rooted science. For such futile amusements by stage light these blown-up toads may be fit or unfit enough. But as *permanent* decorations

* Read about these obliging cheap Germans in Lord Brougham's only novel.

for regular, ascetic schools—if such still exist—they are risky. It is rather hard on timid boys to be indignantly forbidden by their judicious drawing-masters to copy animals or plants out of the Natural History series . . . . . Yet, I have read "criticisms" in periodicals by schoolmasters and board carpenters speaking rapturously of the accuracy in shape, colour and SPIRIT (!) of these puffs. There are sheets, one, two, three, and perhaps four feet long, of the camel, blown out from some execrable two-inch engraving, or, may be, from some two-inch picture by a good artist. You may imagine in what beautiful relief the large "pictures" may show such characteristics as their parents in miniature could not, even if these had been *true*. Those puffs, besides being good enough for *one* futile show by vanishing and vibrating gas-light, may—with other names—serve well as antediluvian ideals resuscitated from the several important fossil species of the cameline genus, brought to light by the learned Professor Marsh of a renowned American University. But I doubt whether the eminent professor would quite approve of these celebrities. Indeed, these living and common animals, are treated by all sorts of authorities just in that "BOLD" [the term is meant to be complimentary by the clever "critics"] style in which daubers treated lost and resuscitated fossils in the beginning of the century. The delightfully vague mystery—Doré-like—may be particularly fascinating. But let us hope that in some centuries the evolution from antediluvian daubing handicraft into something more life-like may be effected.

If these living and familiar animals *must* be traduced on paper by cheap foreign mercenaries from unequally shrinking paper models, I should timidly suggest that

the never taught sign-board volunteers would do better work if they reduced from larger patterns—instead of the reversed process. Following the noble Ruskin's advice, some useless iron-railing painter, or one skilled in whitewashing, or some keeper of the Zoological Gardens, should be set to draw diagrams of tigers, elephants, lions, and so forth, "Natural Size," on some good rough wall, with stout whitewashing brushes tied to long poles. The labour, excitement, and EFFECT of this—with proper advertisements in artists', schoolmasters', and other atrocity-newspapers—would be of incalculable value: especially if done in public, under great illumination, say in the Aquarium or some amphitheatre, in the manner of those where wild beasts were amused and fed with Christians. By reducing *these* "Animaux peints par eux-mêmes" with the help of aspiring ladders, and other scales intended for measuring tellus, stars, and crystals, the error may be less than by enlarging ever so bad a daub. These artists, dressed and behaving, of course, like monkeys, could, if it were not a superanimal effort, take even more views than one mere profile; indeed, it would be grand and supreme to see the man-monkey on his back under the lion manage the brute with his right hand, and project with his writing-lance in his left, a view of the oppressor on the ceiling, appealing to the clouds! Such grand sheets of various views drawn thus authentically FROM NATURE, may serve as rich sources for variety in attitude: by the help of builder's perspective, rule of thumb, and the skill of a ne'er-do-well foreign carpenter. Scholars, artists, engravers, ordinary drawing-masters, teachers, manufacturers of porcelain, bronzes, and so forth, would profit by such gigantic enterprizes wonderfully. It may at once hoist

the nation, thanks to their foreign mercenaries, to tl exciting Tarpeian pinnacle of graphic culture.

Since Buffon's first heinosity, and Cuvier's improv ment on it by racks, one or two editors of scientif books and other canons had their own boreal Teuton too, who professed to have seen a camel and even t have eaten one, and who professed, as is their wont, t know everything. Some of the sketches in periodical were ransacked too, to serve for canons, and perhap *even artists* were enlarged or condensed—if they wer very bad, very BOLD, and very impudently pushing.

Some images, and most current descriptions, are largel due to the institution of zoological gardens. Not al show animals are as lovely in their kind as that littl ghazel given to the London gardens by Her Majesty or as lovely as the magnificent young elephants left ther by the Prince of Wales. Anatomists, zoologists, an their bosom friends, the universal artizans, seem to b unaware that one cannot study an animal properly fron one specimen, even if that one be fairly typical of on of the hundreds of varieties of the cameline specie But these chance specimens are generally very sorr outcasts—sold by the cunning to the unknowin (though the latter be Zoological Directors)—inferior i race, worse for unnatural confinement, abnormal fron change of climate and food, or from disease, and deteric rated by decrepitude. The stuffed specimens in mos museums—which are also among the Norms, Paragon Models, and Canons—are still worse; because these ar post-mortual miscreations, pedantically tortured by me chanics into conformity with the most impossible an illegitimate of daubs. [Some time after this passag was written in another shape, I was glad to find som observations to the very same effect expressed in th

Quarterly Review, when speaking of Sanderson's excellent work about the Elephant Catching Establishment in India.]

Those productions of the pencil—or may be, broom—which are most startling, are precisely those which claim the highest rank. The vices of men who are honoured and obliged by the appellation of "scientific," yet, far from weighing coolly, are crazy after mysterious and sensational novelties; and the neglected condition of the artizans, "true to old norms," are here intertangled. These are the so-called anatomical diagrams of the camel, diagrams in which the fundamental laws of statics, dynamics, and physiology get lost somehow—like the goodness of a dish among several cooks. One of the most absurd parts is what should represent the neck. With the single exception of one authority [that of Mr. Walton], these men all keep the chain of the collar bones strictly in the centre of the neck: the width of which is usually distended to a frightful degree. Yet, every one can see during one survey of a decent living specimen, that the beautiful waviness of the deepest parts in the lower neck-contour is produced by more or less of these lengthy but spiky collar bones, as they press hard against the springy caoutchouc of the skin, which is made to protrude in those *very* pronounced corrugations. Such astonishing heedlessness is productive of a constant series of mistakes, of the same order as those which fashionable landscape stencillers would perpetrate, generally unnoticed. Some of these improvisors would, for instance, with a marvellous pig-headedness, constantly place the fastest portions of a stream wrong with reference to the curves and slopes of the shores; though they must be supposed to know

something about hydraulics, as much at least as may be learnt from swimming, fishing, or steering. Apelles did correct the shoe according to the artizan's advice. But on our hurried manufacturers of light art, advice given by the weekly *Architect* about landscape and perspective, is lost. So is the counsel freely given by the weekly *Lancet* about artistic expression of reviewed pictures, statues, and actors. And most painters of the season, enraptured, like Narcissus, over their beautiful images in their own lake, would think it most absurd to try constructing—and then freely and diligently reproducing—Sir Isaac Newton's hundred curves of the Second Degree, produced by the shadows of a parabola. Instead, in happy ignorance, they would dash off fountains, and waterfalls, and islands, and sandbanks, and fiery projectiles, and forty thousand other paraboloid objects, shorthand and blindfold.

Sir Humphrey Davy says that true men of science and true artists are the nearest kin language can express. The reader may amuse himself by musing over parallels of the two classes of contemporaries who aspire to these appellations. Trace their reading, manners, conversation, leisure, and companions; and then square the parallel of the futile contemporaries of both classes, with the historical names which range in one class . . . Then, as a relief from your disappointment by the moderns, take such living couples as Sir J. Dalton Hooker and Lady Hooker, if you are fond of botany in its growing loveliness . . . As the joint qualities required in a leading zoologist or botanist on the one hand, and in a properly trained ripe artist on the other, are not often found together, let justly renowned artists be decently engaged as joint professors for purposes of higher instruction. The country has a Slade professorship already: and

surely no foreign incapacities need be resorted to—unless the treatment is a mere alms—to have an artist who can decently speak his own language: to have something of the kind spoken of in the following passage from "Men of the Time," about the excellent artist Barye. "From 1848 to 1851 he occupied the post of keeper and director of the plaster casts at the Louvre, and in 1850 [*sic*] was appointed to superintend the course of drawing relating to natural history at Versailles, and in 1854 to a similar post in the Museum of Natural History. . . ."

As we have seen, the natural history of the camel has little advanced [happiness and no history is not always identical] in Europe since the times of Count Buffon and Latreille—the glorious animal is the Eastern Cinderella still; and her slipper, which she often wears and leaves on slippery ground, and in hard winters, has not been picked up yet by the prince who is to establish her Queen of the animal kingdom. Meanwhile a few crotchety goblins in some helmeted fairy's devoted service have been already at work for some time: and that may lead to the rest.

Some few details yet about those artists whom others are likely to copy. Paolo Uccello, the Bassano family, and other painters of the fifteenth and sixteenth centuries, and their followers, do not seem to have even pretended to treat the camel otherwise than as a mythical quadruped: one, for instance, stands out high as a fellow to a unicorn. Though these mediæval pictures contain many admirable human figures; and though many of the domestic animals more frequent in Europe bear comparison with those of Landseer, yet their camels exhibit all sorts of compromise heads

between those of monkeys, horses, cows, cats, and owls. One is startled by circular and prominent nostrils —instead of the long closed velvet fold with hardly any rim; by eyes set square, opening at right angles to the mouth. Or the eyes, cylindrical and prominent, like a pair of opera glasses, are somewhere at the back of the head. Their necks are wrenched into S curves, and their want of equilibrium prompts us to imagine that they are literally creatures of the air. You will recognize their progeny in any number of artistic and popular volumes on vellum, issued by the first publishers "this day."

But the modern *fanfaronnades* of a Horace Vernet and of a Mr. Doré did pretend to show us artistic images of the animals they may be supposed to have looked at: nay, they possibly claim the painting of the camel as a speciality of their own—which, in a sort, it is. Vernet's celebrated "camels" are more "realistic" than the others—if such a term may be used with reference to animal images in which proportions and attitudes, and consequently action and expression, are absurdly unnatural. The hide looks not like living, pliant skin; most certainly not like the skin of camels. The necks look stuffed, and that very badly. The heads especially are utter failures, from the muzzle to the ear; and the misplaced eyes are no camel's eyes at all, but more like those of some lively pig. Some minor peculiarities of other parts have been spasmodically caught; but neither their exaggerated accentuation, nor the general showiness compensates for the offensive arrogance—ὕβρις—of the construction, based on no proper study of the structure. Good enough for the present artistic taste, and that of some time to come, he thought —and rightly, if we notice the sustained popularity of

these placards. It must be confessed there is unity in these Oriental tableaux of Vernet's; as—to take one for several—Rebecca "of enchanting beauty" receiving Isaak's presents is simply a painted old courtezan, who would show "to the best advantage," as the slang goes, under the artificial light of a modern pantomime. Pity the two French firms or *impresarios* cannot secure the artificial lights of necromancers at all times for all their pictures and their authorized photographs and engravings. Such lights, and specially such darknesses, as are the elements of a juggler, would enchantingly suit Mr. Doré's cameline manufactures. Much has been done for him in this way by his clever engravers who prepared the plates to that sumptuous French Bible. As some ages ago the fashionables were enchanted into mistaking a sort of rough pottery for fine poetry [where the lines were cut so as to contour some vase]; so the "fairy-like Doré" has need indeed of the illusion of light and colour to lull the modern fashionables into taking the slightly distorted structure and features of a lion, wolf, bear, and so forth, for those of a camel.

It is astonishing how near renowned French painters can come to the North German presumptuous universality, as justly defined by Lord Brougham in "Albert Lunel." The tremendous chromolithographs published by the Prussian Government from "drawings" alleged to be made from patient nature during a recent "great" Asiatic expedition, show us all "camels" with heads of Prussian dogs, and Prussian stump-nose sheep and long-eared pigs. Give me rather some confessed caricatures, if done by a true hand; those, for instance, in an 1877 double cartoon of *Punch's*, showing the imperial pageant. Caricatures as they are, the camels in this

pageant are infinitely more correct, and belong to a much higher class of art than the camels in the hangings of Vernet or Mr. Doré.

Let this suffice. Here I close; specially, as I have an engagement with two little friends who would soon be at my door with some metaphorical wedges. We are going to act something like charades out of the younger one's latest picture book. In the garden I have Gracey and John, in turns, perched on my shoulder; while I strictly imitate some sweeping cameline gaits. The children's noisy enjoyment—if one may call their refreshing chirrup a noise—and their great willingness to continue, is not lessened by my asking them whether they do not feel sea-sick. Then Johnny and I would travel up to town. In some india-rubber shop I would get a magnificent squeaking camel, the size of a cat. I should just touch up its eyes, nostrils, and mouth, with a pencil, split its upper lip with a knife, and rejoice in the legitimised delight of my playfellow. On our way in town I should be much pleased by inciting Johnny into severely criticising the cast-iron camels—with square skull, sausage-shaped muzzle, eyes misplaced, and starting from their sockets as if under strangulation—which serve as bench supports on the Embankment of this wealthy and artistic metropolis. They might be, with the Teuton sphinxes near them, in keeping with the obelisk.—Passing the grand illuminated pictures of the hippodrome placards, naturally supposed to be done from nature, I should try to make Johnny aware how the sensational artist has made a Saturnine Ogre of the tremendous "camels:" as he made them swallow each its own thighs—though this trick is not half so clever as the slightest of those done by the great Gallic canvas magicians. A treat to

me would be Johnny's indignant horror at the bas-relief monster intended for a camel's head, supernatural size, on the artistic façade of a grand palace somewhere about Whitehall. O Phidias! O Mason! O Aristophanes! *Ἄπολλον ἀποτρόπαιε, τοῦ χασμήματος.** Under a fatally swollen muzzle is a grinning crocodile's open jaw, straight, and extending right under the elephantine eye, which is forty inches too far back. This jaw is armed with teeth which the fiercest Bengal tiger might envy. The teeth show as plainly as if the imaginary brute were fleeced. But let us pass; the fright makes Johnny chuckle dangerously; and as I am responsible for his life—not risking it by feeding him with raw lunches—so I should not like to have to answer for spoiling his manners, by letting him laugh very loud in the streets. Moreover, we are busy: Johnny wants to feed some animal in the show-caravan a short distance from town, as an introduction to his eventual camel ride in the desert.

* O averting Apollo, what a gullet!

THE START.

THOUGH eager, the caravan is always slow and clumsy to set out—every fresh day. The camp fires left behind shrinking, and assuming the mourning veil of ashes, remind us of hecatombs for the prosperity of journeys. They may remind some people of an author's burning, under an Athena bust on the chimney piece, a hundred manuscript sheets before launching one, written, as he says, with a reed as unsteady, because top-heavy, as a badly laden camel. These wearying turmoils of start are worse after days of rest; but, at best, they last a couple of hours.

It has been stated by many French authors on caravans, and stands recorded by the propounder of the "Théorie du dromadaire," * how easy, noiseless, and momentary these starts are. The shortness of time may, to some extent, be accounted for by this; that these accounts refer, or should do so, not to long expeditions, but short trips in well-known and thicker peopled deserts. There are no bulky provisions necessary. Then, in the caravans of which Frenchmen generally have experience, one or two soldiers fall to the lot of every camel, and at least one driver to every two camels. Besides, the poor brutes were during the intervals for rest usually hobbled, and even kept laden.

* The distinguished General Carbuccia, known more generally from the Crimean war.

Those who read, or having read remember, the sketch of our camp, may note the difference between caravans at rest. But there are other differences. We were not only to travel through long tracts void even of nomads, and doubtful as to wells; by paths traditionally avoided by caravans, but we were for months to dwell there. Therefore, in addition to such munitions and equipments as would have served for mere travelling, we had to travel with as much baggage, as many beasts and as few men, as a merchant caravan.*

The packages, however picturesquely in disorder they appear, are grouped rather close among and round the tents. The loads not subject to daily opening are usually on the skirts of the camp. These are first to be started out of the way.

Every driver has got to find, catch, lead, and—within the small busy place—to persuade, veer, lay, then saddle and load his five or six perhaps reluctant or refractory beasts; separately of course, and usually with the help of a comrade. After this, and having got the first animals one by one under way, the man has, during the whole of his following business, to keep an eye on these fore-runners, and often to supplement his work spent on them. For the brutes naturally stray after distant tufts or hopes of dry grass; or they start impatiently on their own account some wrong way; or, perhaps, they run away and throw off their loads by way of adjustment, or fun; for some camels are almost as wanton as men, if not so bad as wanton women.

In addition to this trouble, the panurgic Bedawin,

* When the two halves of the expedition travelled together there were thirteen gentlemen, as many servants, thirty-six soldiers, three or four guides, say sixty-six riders, with a retinue of about five camels to each, and a number of drivers and others, varying from seventy to perhaps a hundred.

has—independently, or in aid of soldiers or serva
to know, seek for, pack, drag, or shoulder, c
arrange, and tie together the various and cha
loads before they are ready to be hitched to the
saddles.

The multifarious main and subordinate work, an
mutual assistance required of this harassed bo
Bedawins, is by no means of smooth and silent seq
but is more like the condition of a coiled chain
being hurriedly drawn out.

It is evident, then, from the amount of work
the relative number of drivers and camels, that, ev
there were more room, only a small fraction o
number of camels could be loaded simultaneously;
six in a hundred and twenty, or fifteen in three hun
by twelve or thirty men respectively. This may ex
the two hours or more of the bustle.

Like the preliminary movements of a satisfied
constrictor about to leave a place, after shedding
tions of its skin,—the start of our caravan ha
uncoiling and creeping motion. This motion
round people engaged in various acts, who grad
melt away; round disappearing meals, furniture,
dwellings; round metamorphosing and vanishing
ages; and round various wrappers, boxes and a
till the whole winds up with the tail tip in the ce
This tip is the little curl of smoke, and this cent
the kitchen hearth. There, at last, the busy v
rating servants, usually standing near the few ca
waiting for them, drink their stirrup cups of s
thing doubtless hot and fragrant, looking up at the
and riders of the receding rear with the feelin
men who have before them not a "hard" journey
a spell of deserved and desired rest and recreation.

The reader who has, no doubt, by this time floated in his mind even higher than a Soudani camel's back, and the unworthy scribe of these exhilarating rides also, are now supposed to be mounted; because the dark grooms wanted to help us to mount, are anxious to be off, that they may look after their pack animals.

Thanks, Fâdl-Allah. How high these breeds of camels are! This fellow, now racing in the sand for a kind word, could not hand me my field-bottle, but raised it by means of his hooked Osiris stick, while my hand dived below my single stirrup to reach it. Well, this was a case of angling from the "ship of the desert," as the animal is supposed to be called by Arab authorities, nay, the life-boat of it. It is a glorious height. And think of the bounty of maternal nature, who in these pets, if anything, of hers, combined the height, power, and dignity of even an African elephant,* with much more than the playful elegance of a roe, or rather ghazel, and the fire and attachment of the true Arab horse. But that height! If I had not seen the animal sit down to invite its rider to mount over the high stirrup, meeting him half way—if I had not seen men mount from other people's shoulders, or mount by slipping their feet into several leather loops planted on enormous lances—if I had not heard of French soldiers using elephantine rope ladders for stirrups, I should have been tempted, perhaps, to speculate on the kite which helped those English sailors who were first to climb Pompey's pillar

* The greatest shoulder heights of elephants ever measured is not inferior to the back height—under the hump—of camels between Cairo and Suez, near Korosko, and here in Nubia. We have back heights of nine feet recorded by Bromfield, and up to nine feet and a half and more by Captains Denham and Clapperton, or some other travellers of the same standing. For elephants the authority is Mr. Sanderson.

and pose on it for amateur stylites. The riders appear like jockeys on the animals. As you appear to me, with your legs bent easily, your saddled camel is three times your height. What we see of that servant just started before us measures only one-fifth of his camel's height. The mounted effendi with his umbrella, farther ahead, reminds me of a masterly picture, showing a little child carried on the shoulders of a tall man, who bears a young palm-tree as a support for himself and as an umbrella for the babe. It may be the Christophorus of Pietro Bassano.

Let the two browse as we look at the dissolving main body . . . . Then . . . . I was thinking of the chimney-pots round Hyde Park. The position, and more especially the dimensions and outlines of the polygonal tubes on the house-tops, with a weather-vane on top like the bunch of feathers erect on camel's heads, need only some little rounding to look artistic. They would be perfect heads and necks of camels. As the movement of some of the nearer animals reminds me of the fairy gait of Greek women, so the more distant animals, apparently standing still, look like a block of houses and gardens topped with thin columns and statues in some merry movement. They are not like columns of smoke; the riders and their arms are defined, sharp and clear, while the animals and men on foot are united in the mist below. The life and motion on the top of the quieter portion beneath, which is never seen so markedly in a cavalcade, is a secret of the camel's delightful gait. The whole appears as if on the slower sea merry boats were playing. The play of the joyous and unpaintable *miroitage* is especially remarkable. It recalls to me the City of Winds in Rabelais, and the illustration of the region of weathercocks by Doré, who

is so delightful to me in many of his grotesques. I do not think we could live here without much wind, any more than the inhabitants of that funny City of Winds.

. . . Not yet. Let us give them all a clear start while we allow our fine carriers, greyhound-like in their racing-looking elegance, to take leave of this all but bare vegetable skeleton of a thorn tree. This dry meal, in decided preference to the buddy green sprays to the left, would have been a worthier theme for a suicidal laugh to the merry centenarian Philemon than the ass enjoying figs was. Well, chopping twigs and munching long and short thorns, too hard—with your leave—for human toothpicks, seems certainly the most self-denying use canine teeth, a pelecoid* incisor bone and such millstone jaws were ever put to. We ought to be thankful that the number of men killed by camels for revenge has not been much greater than it is said to have been. Don't be afraid of her snatching you from the saddle by your leg; she only wants to "touch up" her toilet by brushing her haunch, thigh, or shoulder, with her lips. But generally it is well to note these retrospects of hers; because it may be an intimation to you that something is wrong about the saddle, insomuch that you had better dismount and see, than fall. The floating ring her swan-like head and neck forms in such altitudes may be taken to represent the saving-belt of the "life-boat" to which I have compared her.

I am satisfied I learnt something of the pedigree of this riding camel. Looking down on her proudly-raised little head, I do not see in the outlines much difference between this and a fine Arabian horse's head. This

* Hatchet-like—stereometric term.

head is just a little longer drawn out, in impressively elegant contours. The eyes seem nearer the middle of the head; their powerful relief from the rearward narrowing skull and the exquisite muzzle is a speaking emblem of superior animal dignity, and just now of a richer joyous play. How the halves of this split upper lip of "Yemen leather" are working right and left in sheaving and conveying the twigs to the "palisade" of her teeth, to use a Homeric phrase. And what a living crater of expression these mobile lips form! How they become pursed up, like a modern, elongated missile, in ambling trot when the long nostrils get slightly agitated, as if by augmented breathing to rarefy the air and help the forward rush. Then the sloping long-fringed awnings of the pensive lids, with their long lashes, half reveal to another rider the bay windows of their beautiful brown eyes, and the whole head becomes animated as if possessed of the consciousness of an able man in full action in a trying sphere. They are still at the twigs. They do not drop a single twiglet or a thorn of the broken portions, and each of them is like Chaucer's jovial Prioress :—

> Wel cowde sche carie a morsel, and wel keepe,
> That no drope ne fil uppon hire breste.

The play of the head at this tree, reminds me of the features of a well-trained valet while he is briskly glancing about and packing portmanteaux. You can see well from above the motion of the active eyes as they deal quick but discriminating side-glances to single out the next mouthfuls. And this is packing in good earnest too; for this may be the last opportunity for long hours, or even days of marching, as well as nights of ruminating.

Ho! Look at her head! fifteen feet from the ground surely; clipping and storing the lightning conductors of the tree. Wooden caltrops would be no impediment to a charge on these animals, with ovens for stomachs and swords for teeth. An historical sword was honoured, I believe, with the name of camel's tooth. With her neck thus, she appears like a mosque; minaret and domes and crescent-shaped saddles included. Our Mohammedan grooms would be pleased if told this remark, as it may consort with the Arabic metonymy between the "camel's descent" and the Moslem prostration at prayer. Speaking of such subjects, is it not strange that a woman—and that an authoress so ill-cultivated, in despite of her connections, as to reek of jockeys' and bad interpreters' slang—should have found out lately what Oriental scholars, of all ages and creeds, never detected. The writer of whom I complain, patient and leisurely people tell me, has found out that in Cairo the low and narrow back doors of high walled stables are called "needle's eyes."* I have often seen the camels awkwardly shuffle in through them *on their knees*. . . . . No authority of any standing has yet taken, to my knowledge, notice of this literary curiosity, it being so forbiddingly muffled up in whole actresses' dressing-room-fulls of worthless and bewildering farragos. But it is curious also that Shakespeare says, if I misquote not, "It is as hard to come as for a camel to thread the *postern* of a needle's eye." It is likely enough that "a needle's eye" in Caireen parlance for "postern"—in whatever language—may be a post-Christian word.

Now, come along you greedy brute—I beg your pardon. . . The train is long past sight.

* Compare specially Matt. xix. 23, but consider also verse 26.

Do you not feel incomparably freer on this loft eminence than on horseback? Do you fully appreciat this superior style of having your sight unmasked b the animal's neck and head which, though haughtil elevated, is only at the level of your knees? [But I se you deeply bowing assent with every stride—or do yo bow in sleep?—as if it were you who, by rowing, com pelled your "ship" to move.] The animal's head bein at such a respectful distance she is not likely to knoc it against your face, as some horses occasionally woul And what is more she cannot. So you may doze i safety. However, as a rule, positions shaky by thei height are not conducive to any depth of slumbe Although, in many countries, men in exalted position not infrequently slumber morally; just as equall (though not in the same manner), exalted chimney sweeps contract foulness by their very exaltation. Bu some time after this high planeteering, after so muc battering and tossing in trot, or ducking slower i alternate side nodes*—as if whirled in a sling b an either-handed playful giant—you do fall dee into the sand of soft sleep. Blessed sleep! Stronges of filial ties! Affection of affections, absorbing bot body and soul! . . . Then, dear Mother Earth turns t have her other breast shaded; and we, wretched one

* Describing in the air, with the upper part of one's body, a series funnel heads, is an excellent remedy for bilious complaints. This one of the reasons why camel rides produce, with most constitutio worth care, content and cheerfulness: and that, just in those climat where those complaints are endemic with autochthones a foreigners. Lord Bacon mentions special kinds of exercise for di ferent complaints. Some competent modern author on the same su ject would much extend the list. If I were a great physician, or so other prince, I would make camel rides—even if only in those glorio Shoobrah avenues near Cairo—as fashionable an institution as the drin ing at wells of watering-places.

are, as we awaken, cut off from her by a sort of weaning. The gaping wound from this act kept bawling while we were infants, and it still yawns plaintively at dusk and dawn. This wound, obeying nurse's law, would close before the soapy unction which forms part of the rite by which we are, agreeably to Epictetus, anointed to the sovereignship over brutes. The caskets which contain the more liquid and precious ingredient of the ointment—got from distant mines—are received from the bronzy hands of those warriors who keep watch over them. We remember to have been in such marvellous countries where they have no special mining districts to get this liquid from; for it abounds there, like sand. The next operation—also mysterious, previous to our "appearance"—might be likened to the wrapping some luckless fish in a fresh sheet of paper, preparatory to its being fried: it might be likened, I say, by some one hating the Sahara-Sun as Strabo reports his enlightened atheistic Negroes to have done.

But enough of this. I hope you take kindly to this air-navigation. I am sure I enjoy these rides on the constellation of Cassiopeia—for which the Arabic is "camel-back"—like a free Bedawin who counts them as one angle, if not the hump-apex, in his trigon of worldly happiness. But I am sorry for all those unfortunate tourists who lament so much about their desert trips, though it was my sad lot to peruse their bulky scraps. Perhaps they wanted the trips cheap. A pretty general reason for their incessant sickly complaints is that they treat the Arabs without humane consideration. As a consequence, they are used by the Arabs correspondingly. We are generally served according to our deserts even in deserts—by men and by camels. Some of these tourists even say that riding on the ship of the desert causes sea-

sickness. The metonymy is thus made alai
Frenchman reports himself to have been so ba
complaint that he had himself tied to th
vaulted back: looking, of course, like one of
captives who were made keystones in triumpha

> Summo tristis captivus in arcu . . . .

with—

> O qualis facies, et quali digna tabella.

So the noble mouse Ψιχάρπαξ, after boastin
besieging intrepidity, must have felt on th
Ὑδρομέδουσα's illustrious son when this frog
ming through the watery dunes,

> Καὶ πόδας ἔσφιγεν κατὰ γαστέρας, ἐν δὲ οἱ ἦτορ
> Πάλλετ' ἀηθείῃ. . . . .

"Embracing the conveyor's stomach, while his
throbbed within him from the unwontedn
experiment." An infirm novice might feel e
on the back of a camel, which strides as
swims, with alternate sides. A German to
about his feeling sick on camel back, alter
sick and home-sick [where is the German
land?]. All those who do complain, make tl
generalization: implying that such a stat
with everybody. When some of such peop
get on a camel they would fall sea-sick fro
tion. Such writers would say, they perso
such weakness, as—the unconditional object
remember—other delicate people feel ill in
when sitting with back towards draught
beast: as (according to the *Lancet*) the pass
fall on their retina in an order inverse from
their ordinary locomotion. As I can, unfort
something of the future, I prophesy to y
the two hundred of these coming gloriou

[multiply by seventy riders and more], or say in fifteen thousand single journeys there shall not be even a single case of marine sickness.

And now, if you please, let us try some of their several quick paces. Is this amble not glorious! Wing away then faster still: as you like, my winged supreme steed! I cannot resist forcing contortingly something classical on this rush, this blaze. "Soft-footed Lydian [Libyan], over pebbly Hermes [Desert] hie thee" Λυδε [Λίβυ] ποδαβρὲ, πολυψήφιδα παρ' Ἕρμου [ἐρῆμου] φεύγειν [Herodot. Clio. 55.] . . . This twelve miles amble—or sixteen may be—is better than fanning in a tent: is it not? I almost hear the raised dust-spouts behind us whistle in wonder. How the small disturbed amber pebbles jump with joyous noise at this stir, as if stretching necks, and clapping hands or shouting, and running to meet, and hang to, these meteors dissolving in the mirage, and bending as rarely over all, as a rainbow—'Daughter of Wonder'—made glorious by the suspended water,—would bend over Egypt. . . .

Im Flug begann ich nun Den allertollsten Reigen Und liess den heissen Sand Zu hohen Wirbeln steigen.	At once I started off, In a most frantic dance, And let the heated sand Mount high in spouting whirls.

From the "Sahara" of Alexander Grafen von Wurtemberg.

Look at a fine camel running! This is best done by riding on another. How the chain of the neck straightens and bends alternately! We are "rowing" no longer in this rapid flight. It is supposed that running beautifies long-necked animals, while it comicalizes short-necked ones. I must laugh, thinking of the manner of that huge hyena running across the caravan the other day: pursued in vain. I declare, our friends run, as they

look, like gigantic skates: so smooth, so narrow-tracked.

Well done, my noble Split-Ear. . . . You,

> A steed that in a single rush would strain,
> Though long as hope, quite the extended plain—

need not whisk as fast as this, now we are in deep sand again. And ourselves had better look out for the track of the caravan now . . . . Hem . . . . I say . . . . We did not get lost yet . . . . Pooh . . . . Bless that Captain Galton! He explains how people do not get lost in wildernesses so easily as is generally thought: though I often tremble lest the learned Captain himself lose himself in the wilderness of scientific committees, as he errs in the interminable range classed between psychology and sewers . . . . Ah, here is a track, though single. . . . Another run ought to bring us into sight of the main body. Well, there is no doubt about the lineage of these two pointed-eared ones; and well might it have been said of either, "Noble is herself, and her brother an illustrious father's son; and her uncles run without reproach." Besides, it may be worthy your notice that the remains of their ancestors in their family vaults date from another geological age.* Thus, the Arab myth about the camel's having been brought from the Rock, may be interpreted—a myth which, with others, I sorely miss in the "Zoological Mythology" of the illustrious Angelo de Gubernatis. . . . . Now up this ridge with a spur! And behold the caravan.

At this distance the thronged body appears scarcely

* The Mericotherium in the miocene rocks was found to differ in nothing from a camel skeleton [Murray, "Geographical Distribution of Animals"]. The species hath "survived chances and changes" of a world-refashioning character.

moving, only very slowly floating, little raised in the air, flat and elongated, like either of those species of clouds which meteorologists call stratus and cirrus—to use the simpler expressions. The aggregate of the wiry tall legs, making these tracks, look like falling rain: and the occasional flashes of a spear or gun, like lightning.

Most people get to like to look at these tracks for hours of silent travel, specially where there

> . . . Are witnesses denied—
> Through the desert waste and wide
> Do I glide unespied
> As I ride, as I ride.
>
> How has vied stride with stride
> [How hath side vied with side]
> As I ride, as I ride.

to spoil two lines of Mr. Browning's. [The tenses are not of my spoiling.] The single prints, if we look not too closely, we may take for those of some giant cavalry having gone the opposite way. I am reminded of the clever Hungarian horse Tátos, which, according to Bishop Ipolyi,* advised his master to shoe him the wrong way in order to baffle pursuit. [Another hero of the same mythology rides often over these very deserts on a dragon, to sell the brute's flesh for diamonds to our negro friends in Dar-Foor, who get relieved from the excessive heat by pieces of that meat sandwiched under their tongues. He rides back on the clouds. It is a pity we never met him.]

The middle of the whole wake looks like a sheet of water under shower. At the borders the wavy lines of the separate tracks may be distinguished: on which the footprints seem to be strung . . . . . Here is a

* "Magyar Mythologia."

mould of a camel which has been stopped and brought down outside the main sweep, and cross-ways to it. The mould looks like the impression of a twin screw-ship; or, rather, as the lazy or capricious brute has stretched its neck on the sand, like the print from a huge bass-viol, which gladdens my heart—as I think on my favourites, and that of the navy, viz., the violins: specially as played by those intoxicating gypsy-bands from Hungary—some of whom stirred up connoisseurs and critics, in the last Paris Exhibition; as I just read in an excellent paper by A. de Bertha, in an August number of the *Revue de Deux Mondes* for 1878. The travelled Crown Prince of Austria-Hungary says, in his first spirited ornithological diary, that no manner of music has such fascination for him as those melancholy and wild tunes which, in the first instance, are composed by the Magyar Bedawin on his rural pipe, and faithfully played and preserved by these exceptional gypsies on their brassless instruments.

In the more leisurely-wound tracks the feet appear nearly equidistant, though there is very great difference in size. [The hind feet are less than four-fifths of the fore feet—as about thirty-six square inches against fifty—in the breeds under seven feet high.] Those tracks in which two-and-two unequal feet appear almost together, are straighter and remain, perhaps for a day after the camel has passed. But the meandering tracks are more interesting, especially as they testify that almost each camel has a distinguishing gait. But we will not spend study on individual vestiges. The shower of footfalls made these manureless, contemptible sweepings, called drift-sand, turbulent. How demonstrative just now this impressible sand was in embracing with effusion our camels' feet, ay, and their legs—while we

were on the spot. Shapeless already, the last vestiges will be gone before next dawn, as if produced, forsooth, by nothing more consistent than futile raindrops from desultory clouds. But look at this rock—one of the saving sign-posts of wanderers. This does not open a soft bosom like the sand, by ready and deep emotions —dragging down the weary, burdened friend, and sometimes making him stumble and fall. The steady features of the dark porphyry are lit up by a quiet smile as soon as it participates in the camel's reflected light colours. Besides welcoming its old friends or their descendants, the rock eases their journey by inviting them to the numerous smooth footpaths it wears, like decorative necklaces, or a paly escutcheon, for their sakes. And do you notice with what engineering instinct those managers of loads have hugged the hill sides with their gentle roads? For they rather walk along level or isoclinal, than over vertical waves—in fact, levelling their paths, with remarkable foresight, to long main slopes; and you shall see that the camels do not do this "like driven cattle," but spontaneously with an amusing persistency.

As we are approaching now the caravan it appears like Duncan's army, a walking forest; so that the term "park" may, with more propriety, be applied to it than it is professionally to railway rolling-stock, or to ordinary armies under march. The loads and dresses, for the most part bulky, are good reminders of desired foliage. There is no stint of poles, tubes, and arms of all sorts, to delude us into an idea of branches. I have heard of greater infatuations, not only of the learned, but even of other people.* And the animal's legs, dry and tapering, are surely as like slender, yet gnarled, tree-stems, as animal extremities can well be. As we see

* Idea owing to Izaak Taylor.

several of these gaunt spindles pass in dignified succession over what seems the top of a hill, I think of that emblematic living sign-post of horse-breeding England; that is, the four lopped elm trees, near Datchet, Windsor, which, with their crowns united into a familar shape, are known as the "Vegetable horse." The distant growl of the mass, just raised at some obstacle, is translated to us into the noise of winds raking the forest —the crowns of which appear gently shaken and playfully pushed about, and the stems bent a trifle. And, lo! with a variety of images of blown-down leaves, and fruit, and blossom, the ground beneath *our* Windsor horses is strewed. Forget for a moment that the hind-foot marks of the smallest breeds in Africa are from 7 by 6 inches, to 8 by 7 inches, and the fore, from 9 by 7 inches, to 10 by 8 inches; and look at the variety of vegetable impressions we seem to have here, all pointing forwards.

Spikelets of the Quaking Grass.

The flat fruits of Penny Cresses.

Capsules of the Yellow Rattle.

Of Pepperworts.

Kidney-leaved Sorrels.

Pods of Mithridate Mustard.

Of Speedwells. [May they prove omnia!]

The fruit envelopes of Ivy-leaved Speedwells.

The cloven seeds of Elms.

The beautiful joint seeds of many of the umbelliferous plants.

The fruit of Speke and Grant's Winged Euphorbium. [Hymenocardia Heudelotii, Muell. Arg.]

Pomegranates,
Quinces, } cut in halves and showing the sections.
Apples,

The leaves of two whole and rich genera of garden and conservatory plants — Twinleaves and Bauhinias. Even if the gorgeously ornamental flowers of the latter do not show themselves, people like them for their very leaves; those of some species equal camel tracks even as to size. They are named after two homotropal brothers, and are themselves affectionate climbing plants. There are species of it which grow in camel-breeding Nubia.

You see the tapestries of retuse, emarginate, obcordate, two-parted and two-lobed leaves, and of two-pointed, ovate pods.

Litters of all kinds of petals, retuse at their broad, split at their narrow end.

Layers of the "standards" or "banners" of the multitude of those perfections of blossoms—*i.e.* the papilionaceous: and even their under-lips, split like the camel's upper, are by no means excluded.

[End of the philanthous catalogue.]

But there, now, still nearer, and in spite of, and across, and over the flooding mirage, the troop appears more active. It is a heaving sea, confused into a crowd of ships with classic and ancient high prows, square or other shaped cargoes, floating wrecks, men as if rowing and swimming in all styles, hugh back-bent fishes, and swimming birds. Spears and rifles and what not, appear as masts at all inclinations; and glimpses of the camel's oar-like legs, and flat tails, rudderlike, appear. Not much a-head of the rear six or seven consecutive camels are driven from one edge of the caravan to the other: and this action appears like a quiet succession of waves. Loose garments and floating head-tires contribute to form images of sails, flags, and pennants. The very

tracks below now appear closer, more varied in their shapes, presenting impressions of—

Twin skiffs.

Twin obtuse-headed fishes.

Pairs of breeches.

Pairs of enlarged camel-ears.

Pairs of duck's wings.

Of oriental pointed shoes.

Two baby camel-heads, laid side-ways together, lower jaws touching.

Mussels, open and spread out. There is one species of large and narrow pearl-mussel in the Red Sea which, when opened, would fill out a camel's hind footprint completely.

A kind of Sea Urchin, well known under the name of Spatangus.

Impressions from contiguous shoe soles, barring heels.

Pairs of human ears, put close together.

Impressions of the two contiguous hands, with suppressed thumbs. The size of these is that of a tall man's hand-prints for the right fore-foot mark, and of a woman's for the hind.

. . . . We can now distinguish the animals in the rear individually. They present to perfection the outlines and proportions of erect swallows with long tails, as they hold on at nest-brinks. The whole sweeps of the contours, from hump to soles, are answered by those from beak to tail. There is an affinity even in their legends. The migratory "bird of consolation" carries that "wondrous stone" which enables her fledglings to live in the air; the animal which is food, drink, clothing, shelter, weapon, vehicle, medicine, and friend to man, carries that wondrous fifth stomach which enables her human friend to live in deserts.

Behold the movements of these narrow-gauge animals

and the genesis of their tracks. The animal—with reference to its height at least—is narrow enough; its body almost fish-like; and—with its fish-back and dorsal fin,* is hardly two feet across in those smaller varieties which are about seven feet high. But the quadrangle of their feet, when standing, is only twelve inches or less in width; and their track is merely a line, that is, a single file, and often as straight as that of the hyena, or of a man walking "heel-and-toe." But if the track is sinuous, it proceeds from the fore-feet *overstepping* the main line, while twisting the body in the amble. Its walk, then, is like that of a man —taking his toes for its fore, his heels for its hind-feet—with his feet inwards bent, and placing their centre on a straight line. The feet swing in horizontal arcs. The hind legs are, especially in walking, typically wide, very wide apart; and then, bent outwards. The more you watch the mechanism of these gigantic compasses—which remind me of the governor of a steam engine—the more you get to like it. Note the beauty of the mowing-like action in these Bedawin-gun-like legs with the firm straps of their broad sinews distinctly revealed in part. The whole is a "graceful undulating amble," to quote Professor Owen. As the weight of the body is shifted, like a sieve, from over the left legs to be balanced on the right, the counterpoising play of the hind legs appears very pleasing. The sinuous buoyant progress of the body above the straight track is akin to that of a canoe steered with the oar, which moves in progressive cones. Observe also the oar-like featherings of these feet inclined a little inward.

* Quatrefages de Bréau's comparison is between the camels filtering water into their reservoir, and the gaseous secretion into the air-bladder of some fishes.

Observe how the beasts save power by this walking on a straight narrow line. Before I get more experience, I hold the camel is an argument for the competency of narrow-gauge railways, through deserts at least. Nor while I see the comfortable appearance of these four-footed wedges saddled with their wide out-standing loads, would I hasten to echo one or another learned critic's strange-sounding anathema, of "unmechanical"-ity against either camel imperishable or flourishing railways: for both were treated like this. We may soon hear, perhaps, man's anatomy cavilled at, because he can ride on a bicycle. I am not so sure, however, whether the recommended balloon railway across the Sahara* would not prove amechanic:† though it would look uncommonly like a file of camels, and would be θαῦμα ἴδεσθαι—a marvel to behold.

And now we have caught up to the rear of the caravan.

* By Major Browne, 1850, *Mining Journal.*

† You may remember that the word "amechanic" means, among other things, "disastrous."

GENERAL REVIEW OF THE CARAVAN.

As we approach to, and come up with, the first small group of fifteen camels, which we will call the rear-guard—in compliment to the three soldiers perched up high—the sounds unite with the aspect to make us feel particularly comfortable; the impression is like that made on a farmer reaching his well managed domain, by the pleasant familiar life.

You hear the sounds caused by the shuffling of the loads and of the feet; hear the clatter of the wooden, the ding of the metallic loads, splashing of encased water, the urging whisper of a brandished rope or of a smacked whip; or the gulping lisp for the better animals, and for the lazier ones frightening shouts from the three drivers; perhaps even an excited blow. Then there is the murmur or growling rejoinder of the brutes as they mend their pace, quiet chats, animated dispute, idiomatic ejaculations, the Soudani accents, the Bedawin emphasis, the Ethiopian voices, occasional laughs with the Nubian relish, and periodical songs. At intervals, on firmer ground, a clatter of pebbles is stirred up; and the pats of the elastic feet are heard. This symphony is aptly seconded by the great chorus a little ahead.

But it is the spectacle itself which untiringly pleases every day for fresh reasons. Our sight is agreeably kept rocking on the seemingly slow undulating progress

of the corrugated camel necks, the heaving backs, the lateral see-saw of the multiform loads, or the apparently leisurely swing of the gaunt legs. The cheerful and excited alacrity of the drivers is in good relief with the quiet and dignified oscillations of the riders; which latter are suggestive of politeness, mutual goodwill, contented dozing, ruminating meditation, or a slight intoxication.

The movements of the main bodies—animate or lifeless—wind up in flourishes of objects with easier play. Upright spears, rifles, and the like, for instance, rejoice in being brandished about; while dresses and trappings flutter in the refreshing breeze like so many livelier and airier offsets to the more common forms of gravitation and gravity.

The diversity among the human races of the party, in the dresses, in the loads; and the absence of any nicety in arrangement of ranks and files, shows still more life by reflection on the ceremonious uniformity of other trains marching to the tune of monotony. Even the charge of each driver does not appear very clearly, though it is pretty regular. The usual charge is four at least, like the number of a party of ghazels, a cluster of camel-ticks, or the monotonously usual allowance of a perambulating London nurse. Besides, the varieties in the camel's gait are more obvious than even the great differences in their heights—between six and nine or ten feet—in their colours, between cream and coffee, extremes included; or in their shapes and in the condition of their coats.

Yet the great mass now before us, does not, even in its remoter parts, appear confused. The scattered riders stand out distinctly; because their relative number saves them from being objectionably crowded, and because of

their elevated position in the upper air, which is freer from dust and mirage. The quick, heavy-coloured drivers on foot, or parts of them, are also in good relief against the slower light-coloured animals, or against the light-coloured ground. These drivers you will see with a tendency to range themselves weatherwards, whenever the poor camels begin to smell high from water-starvation. What animals these are to rally even from dissolution! This smell is sometimes almost as objectionable as the breath of garlic-eating polite Southern Europeans is to delicate — fusel-reeking — Northern Europeans.

Does this wagging gait of the animals not strike you as if they were urging on each other in a resolute way? It certainly gives unity to the movement laterally; just as the preceding ones are evidently being pushed on by those following: thus transmitting the driver's wish, and contributing to the unity of the whole.

The three Arab soldiers, with their flat shining kegs of water on saddle, look contented enough from under the dark porphyry hoods of their wide cloaks. But our sight would have naturally settled on this central figure in granite [grey], even if we should not have listened to his answer. The fellow is engaged to be faithful to our friend A. There is a kind of family happiness in his bright, very bright look, as if at once expressing a man's power, a woman's devotion, and a child's delight in both. He is that sort of fellow who would offer to serve, lodge, board and cheer a bankrupt kind master: uniting the qualities of Timon's steward, Ulysses's noble swineherd, and what Mark Tapley would have been under Homer's or Shakespeare's treatment. He seems to prefer the dress of modern Christians. To what joy we excited that fellow when one Sunday, asking for his

Abyssinian Bible, we contrived to extract the alphabet and the many figures: he made us quite proud of our achievement.

Why, these tent-carriers, some of whom are naturally the last in starting, might have pushed on through the caravan by this time: as they have to be among the first in arriving at the next camp. The bulky white twin loads tossed and heaved about with the poles are like balances—let me say—of justice: considering the present gravity of their four-legged promoters. The camels all are varying pretty freely the play of stretching out and drawing in their chain-like and firmly plaited necks. Even the upper sweep of the neck contour is prettily modulated by the oscillating fringe of the close folds. The animals behind—appearing now fore-shortened—seem to let roll their heads vehemently down all the height from over shoulder to breast, like the spray along an angry billow. Some dip their heads down—as if to keep in exercise for desired grazing; others stretch them forward as if sniffing the next well; a few apparently converse together; and the heads of these are turned sideways so as to look at us while passing.

This light-loaded one I touch in passing knows me besides. I used to ride her—let us call them all shes like the Greeks sometimes, in compliment of their many ship-like qualities. [The colour of this shaved one is not natural: it is anointed with tar all over against some hull-beetles.] She is a riding camel, and carries like a well-hung coach. One day, while riding her between our working stations, she, unasked—without a preparatory stop or even a grunt—dropped on her knees with all the accumulating momentum of her height. You know with what sudden might they drop all that height: even after duly preparing. Imagine your

horse's fore-legs abruptly cut off close to the chest—and imagine its centre of gravity shifted much forward. Still, she must have managed in some wonderful way not to throw me: unprepared, and sitting at ease as I was—whatever that may mean with me. But after having repeated this feat twice more in less than an hour, it penetrated my dense mind that this might not have been mere stumbling among the thorns, chasms and sods. I accordingly descended, and examining, found a fresh saddle-gall. And all this time she did not breathe a groan of pain. Of course I gave over riding for the remainder of the day,—as I was working far from the caravan—and delivered her up to my alarmed squire as soon as he anxiously came up. Here, old girl, have a biscuit. We just passed her pedestrian owner. He is that handsome coeval of mine with hair plaited in seven braids, whom you just noticed looking up to me with such a smile as if I were his long-missed father, or had saved his life. He is a great friend of mine —for the negative reason that I never struck or rebuked him.

But let us raise our hands which, or the shadow of which, will urge these two ladies to bring us up with the larger cluster. What animals, to obey thus the shadow of our sovereign wish! . . . .

You see, this train is a continuous race. True, the main-pace of this caravan is only a trifle over two miles and a half, or, as we computed, four kilomètres an hour. Yet calling the progress at this rate a race is less exaggerated than using the word race as a metaphor for busy life. Considering all the component forces, we must call the journeys intense, the pace brilliant, and the race of the men on foot of the finest. The main pace itself is for the generality of men in condition a

very severe one—without regard to the weather—over ground either too rough on the slopes, or too soft where flat. The English party were in excellent condition. So were the Arab officers. The sturdy soldiers of the Nile valley had weathered, and fought in, several campaigns. They are tempered, like Damask steel, "with the scars of various foes," to use the beautiful language of the noble athlete, the present Archbishop of York. The Egyptian, Nubian, and Abyssinian servants were all that can be desired. There was great inducement to seek relief from the fatigue of long rides in walking. Yet I have not been aware that any one of all these mounted people ever attempted even as little as an hour's walk, except one or another of the English party. There were none in our party, thank goodness, of those evil managing rough engineers who would madly quicken their pace whenever reaching a rough fresh-ploughed field, a bog, morass, and such like tracts.

Now judge of the drivers' work, not forgetting that their exertions, previous to starting and at arrival, would, each in itself, suffice to upset other people for the day. Then remember that we are not on roads, but on the rough. It is no mere walking: it is either climbing, or wading; or both, when wading up a sand or sandy hill. And each height counts twenty-five times as distance—as the Reverend and learned surgeon, S. Haughton, shows us in his "Principles of Animal Mechanics." Thus every inch and a quarter of sinkage counts for an additional step, to take only one method of reduction The chief object of the latest starters being to push through the main body, and that of the others to follow close, it is clear that such a purpose cannot be attained by the drivers without a great deal of running in serpentine courses to haw and gee across the obstruct-

ing caravan. The movement of this caravan is, indeed, like that of this damascened sand dune we are passing; the last becomes the first, and the glittering, as of wavy, watered silk on the surface of the dune, is answered by the way the Bedawins run, oscillating like a tide on shore. The animals must not stray too wide; more compact batches must be preceded in wider wavy circles: though there is elbow room in our caravan. The skein of these lateral zigzags crosses and re-crosses those slighter longitudinal sinuosities which even the leading groups are not free from. For this is as vacillating as the camel's gait. Even when accurately piloted to a given point by a compass, the itinerary seems to a surveying observer a succession of false starts, compromitted by wayward landmarks in mirage, and by shifting shadows, winds, or stars. These general shiftings increase the particular work of each driver; and that, in proportion the faster progressively the farther he is behind. What he gains by reducing his heavy lateral guess-work as he helps his camels—themselves intent on pushing through, to pass their preceders—he spends in wielding those tall animal levers. But it is refreshing to see, here in the middle of the caravan's length, how at this moment such loads are marching up which were the last to start. Of course, not all of these eager ones are required to unload first. But such general eagerness keeps the rest of the Bedawins fresh, whose muscles and brains are thus kept working a-breast. The whole troop appears to the driver who is not yet among the first, not long with an evident direction, but broad and indefinite, like the fresh tracks, which, in many cases, he had better not follow. He must steer his own course, according to his own notion of the main direction, combined with his inferences as to the leaders' shifting

positions, and he would settle with his neighbours passing. Although there are constant slight fluctuations from the very beginning in the resultant integral speed, the continuity of the exertion is as unflagging at the fifth hour of the march as it is at the fifteenth. Nor does the grand pace slacken whether half-a-dozen Bedawins, more or less, are indulging in an occasional lift for an hour on the lofty saddles. The sight of this most beautiful racing may abate the surprise of those who have heard of a certain horse race, projected in the Saharah, between English and Arabs. The Europeans, inquiring about the length of the race-course, were coolly told it is to be a fortnight's run. Sometimes a directing shout is communicated from a-head; at others, mounted guides would post back to rectify the range; thus some of the flat motes, and sometimes rounder grains, churning in the mouth of a dune, would fly back. Now and again one of the hardest workers would swing himself up to the height of a moving camel, by first jumping up high to clutch its neck. From the brute's back he would look out like a sailor in a squadron from a mast, and possibly gallop onwards with his straight sword kept pressed between his thigh and the side of the charger, as if he were one of those brilliant harbinger grains which sometimes fly along the spine of the creeping dune. Others are nothing loath to run for a look-out, even hundreds of yards out of the way up an occasional eminence,—be it a hillock, a solitary smooth boulder, a termite-tower, or the curiosity of a tall tree. Do not think the gliding sand-dune has less atmosphere of its own than what you see on its kindred image—a gliding flame on a level slip of paper under slow combustion, raising and fashioning successive parts of the paper-slip

into the shape of these sand-vamps. As I can now survey the whole troop, it seems even grouped like the sand-slippers—with the centre of gravitation much ahead. This again is in keeping with the charming mechanism of the single camel whose centre of weight is so far a-head that—specially in running—a hind foot is required to alight momentarily under the advancing nape. All these exertions integrated, with important additions I have not thought of, make up a sum of tremendous labour. This labour is, indeed, akin to that which some of these toilers' Egyptian cousins perform for half-a-crown, when briskly running down and up the steps of a yard in height which compose the two biggest pyramids. When some one shall have perfected Marey's recorder,* and applied it to a good camel breeder, the world of sense may be surprised at the amount of work ascertained. There is, then, as much oscillatory running in serpentine courses on flatter ground, on account of the chronic trials of the main bearing, as there is winding up, twisting down, and doubling of sides over broken country, from local vicissitudes. It is this which accounts for the remarkable evenness of our general pace.†

These alternate shuntings remind me of British codeless railway management. This, to the surprise of foreigners accustomed to elaborate codal regulations, as is well known, secures the delivery of even masses of raw goods with almost postal regularity. But the

* Described in his book "La Machine Animale."

† The pace of simply migrating camel herds may be said to be about two miles an hour—specially when including milch beasts and fillies. Very small camel parties, however, on mere trips through populous steppes can travel three miles and a half an hour on exceptional days; and they can continue for days and weeks at a rate of about three miles an hour.

general aspect of a caravan, and, in some respect, the mechanism also, varies with the nature of the ground.

There are places where the course is obvious, either from the narrowness of available way, or from such a conformation as affords a good view of the whole moving mass. In such places, these excellent camel-men—adorned with their six partings of uncovered hair—unbend, and walk easily—as it appears to us lazy riders. There they would appear with pensive mien and —as the classic Duveyrier says—with the haughty gait which distinction and advantage owe to their long association with the camels. This "easy all" happens especially at the places where our precursors have for centuries levelled and smoothed for us these paly paths. It is then chiefly that the men would find opportunity to gather in fours and fives, and enjoy each other's company, dressed in regulation bathing costumes while perambulating the free dryness of the desert. It is then that they would sing to themselves, and to their gratified camels, who listen with ears turned towards the nearest song. And who knows but the songs may gratify the good rock, which both directs them and eases their toil. Ay, the Bedawin sings to the rocks, to the animals, and to his forefathers; the forlorn caravan sings to a forlorn caravan which may long ago have passed over these paths they have helped to maintain. Our walking friends do not forget, however, that they are racing all the same. Nor would the waves of the songs alone impel the animals as much as the learned Sybil, Miss Rogers, says in her bewitching book, or as the illustrious Vámbéry credited, half in jest, the horses of *his* caravan to have been fired by the spirit of Hafiz. For there are visible as well as audible burdens and apostrophes at the ends of the verses—the visible ones being the raised sticks.

. . . . . Yes, the camels are urged even by the reacting burthens of the songs; because the songs, with the burthens off, send them dreaming, you see. Just so. As the Bedawin hums of memories, the camels, and we, and all, are made dreamy with recollections. We all have our memories, you know. . . . I never thought my own were so active and numerous as they are, nor what they can do; till the time of a supreme agony when they all burst forth and literally saved my life. I must not name the dear tender ones, lest they deem themselves called, and come this time to play havoc with us; uniting, most likely, in a sweet, intoxicating, tornado, spiring and extolling my soul, and upsetting, or, at least, alarming, my nearest friends. But this general dreaminess around us is catching. And desert rides in themselves are sometimes intoxicating, you should know, my companion—as intoxicating, perhaps, as the martial music of the Magyars, the originators of the hymned Hussars. . . . . I name them not if I say that these immortal ones, these little memories, are sweet and gentle legions—a tiny fairy exodus, bottled, as it is, in crystal. And they are very, very eager; but they are also as full of varieties as is their keeper. And this time, may be, they only want to parade before, be civil to, and amuse my friends. Yet, though I, who should be their patriarch, think them lovely enough in their heavenly aspirations, my friends may deem them not yet fit to be seen. Bless them! and let them still remain in the gorgeous, nursing valley of their birth, till they shall have grown, been tended, played, trained, served in minor capacities, come of age, and appointed, each in proper season and place. . . . . So, so, sweet gentle ones! They are all fresh and hale, and merry in their soft little nurseries—

all. Not the remotest of the dear kind words is lost; not the faintest of the dear sincere smiles is crushed.

> Er zählt die Häupter seiner Lieben
> Und sieh' ihm fehlt kein theures Haupter.

He counts the heads of his dear ones; and, lo, not one is missing. Yes, they are held in a mutual embrace —all, all. I can hear the subdued music of their pent-up mimic-revels and mimic-battles well enough, as often as I bend down sufficiently. One look, one list more! Now let me pat the draperies and smooth the curtains. So, so—by-by! And now we must awake! We have let ourselves lag, and are quite off the caravan. And, moreover, something is before our eyes which makes them useless for the moment. Spurt at once! Now, NOW! . . . . . All is well. I can hear already the rousing shouts of my Bedawins. "Hoy, hoy!" And as they raise their short sticks, I climb what has just been like a thick curtain; it is a watershed. . . . . And from this top of it, our sight, our head, is clear once more!

Here you have the whole three or four hundred camels at a glance: in this little-depressed, broad, and wind-swept valley between the two ranges. For some short time they appear as if settled, like some shot, in a long spoon. Gradually the gathering elongates, and soon becomes like a hideous modern "scientific" ship—be it said with all deference to the profession just boasting immortal names—the side-loads appearing like cannons. Presently the prow and bows sweep upwards; and the former, tapering, comes to shoot up abruptly high, near the narrowing pass. At last the proud prow culminates like a tapering figure-head of a beautiful classic galley. Another moment, and several

gaunt mounts of the van-guard spout up on the top; they are small, but, in that pure air, delightfully clear and brilliant: like the nosegay of erect feathers on a peacock's head. The wiry quills under the fans of vanes are admirably represented by the thread-like appearance of the etiolated legs under the light bodies. The evolution of the whole mass into the form of Juno's resplendent bird is complete. The head and neck of the peacock are like the serried "miroitage" caused by the slow shiftings of men in a close and well-behaved Levantine "crush." The bulk of the body of the peacock delights us with the freer play of the fidgeting "papillotement." The remaining portion of the bird is fairly well depicted by the straggling and sauntering members of the caravan, in which the metallic sheen of individual riders nearer to us simulates the brilliant eyes on the bird's gorgeous tail. The hundred eyes of the peacock's tail as the representative of jealousy suit well the camel's jealous character. This was known in Europe as long ago as the time of that sublime clown the author of the "Anatomy of Melancholy."

Painters best love those caravans which are broken up by uneven ground into groups or bent rows, but especially those which are bent into curved files in different directions, on account of the variety of attitudes and shading which they afford. In crooked valleys, broken into still smaller sections by tall trees and other vegetation, there is NO caravan at all; it is scattered into elements like a "Prince Rupert's" drop when its point is broken off. The camels do not seem to like such places particularly, and we men do not feel quite at home in them. We may be pleased, and may even admire them; but still we feel shy, as though

paying ceremonious visits; and, as it were, we elbow each other like clowns in important people's presence; or we wish ourselves out of them, as if in an ill-mannered, or a suspicious crowd. But give us an expanded plain slightly undulating to rock gently on. We do not much care for the wide sand-prairies with their crops of pale unpolished straw, and undergrowth of short, fine hay, even if variegated with islands of path-striped rock or pathless gravel; but we prefer the plains studded only with frugal tufts of savoury dry grass, and adorned now and then with those terrestrial porphyry radiations of thorns in the form of flat inverted cones, over the discoid tops of which we can look freely from the commanding height of our saddles. There we do feel at home, and are pleased with the details of our family life, as they stand out, nay, dance out, in relief.

Here is our friend B., riding abreast with a refreshing batch of water-skin carrying camels, and imitating with the motion of his deservedly exalted upper half the outlines of those top-shaped treelets just fondly mentioned. This man [he hears us] who deems it meritorious and manly to be counted a man of the world, here delights in his freedom from social shackles. Who would have thought it! He appears "utterly regardless," as his well-worn phraseology goes, about what that superstitiously credited Liebig extract of the world at large may say behind his back, which well-worn back itself is certainly provoking. Do you hear, B.? We are discussing your several square, palm-sized patches of violently disagreeing colours wherewith your coat is mended, but not improved. C. says the over-stimulated gaiety of this coat makes him melancholy, by reminding him of the motley foliage in

the autumn of barbarous climates. Indeed the gaiety of these patches on the coat, and the gaiety of the foliage may truly be said to be *galgen-humor*. [The German word means that intemperate mirth in which some of those indulge who are sentenced—to public display.] But if the patches were all of the same colour, they would be in very pleasant keeping with the six callosities of Mr. B.'s camel, by which the relieving knottiness of the lengthy limbs is agreeably accentuated, and, they would also be in strict keeping with the seventh, heart-shaped callosity down on her breast. These callosities, Count Buffon had thought the noble brute wears as a decoration for its services to humanity. Buffon's dictum has been contested; but when we hear more news of Colonel Perjevalski's wild camels than the last in Petermann's periodical, Buffon, somewhat restricted, may prove correct. But I say, B., are you aware that your cheap cork or pith hat, at the mercy of every coursing breath of air, is a lady's tropical hat? And the inane whiteness of the multiple-folded neck-veil is also womanish. Only these tremendous square patches are not. Never mind, if *he* doesn't: *ménagez la pitié*, harden yourself: I have had to suffer in my sensitive heart ten-times as much banter, or "chaff," as he would call it, from Mr. B. ere now:—simply because—as you must have noticed—I am full of characteristic angularities like a cluster of crystals: while he is as smooth as rolled amber. Fortunately he is hardly broken into sufficient reflecting surfaces to notice a thousandth part of these crystalline polyhedralities of ours: which, if damaged, would grow again. But to imitate Mr. B.'s dwelling on one subject: why should ladies never wear patched clothes? Because, [this is Mr. C. speaking], if they cannot afford whole

garments, the impecunious wretches will rather have none at all, or next to none—as seen at cold-producing balls.... Don't you make mistakes, C., they are more than clothed: they are darned all over wherever exposed, as soldiers darn their new socks to wear longer: they are covered with the insinuating garments of light and fragrant powders, I am told by microscopes: covered, like butterflies, or coated like bitter pills.

I say, D.—this is the physician—are you "cognizant of the fact" that public health is in danger through the manner the medicine-camel appears to-day? She is a couple of hundred yards behind. She has got no halter; and, consequently, is neither attached to an attended batch, nor separately led. But for her small size—hardly more than seven feet, if that—she would be the beauty of the caravan. She glories in the colour called after Queen Isabel; her skin is to the touch like the petal of a pansy; the first spans of the soft neck and the fine broad shoulders adorned with silky golden fleece; her lips are like an opening flower-bud, just pouting, and at times looking unconcerned; she has a stately step like a young Begum, managing her light train like one of those few women who can dress at least. And she has a self-willed and haughty—*not* conceited—way of looking and of carrying her free head that made me shudder, considering what she carries in those large, brass-spangled boxes coated with English harness-leather—the colour of which suits her to perfection. I like that camel. Her carriage does not make you suspect the tremendous weight of her pretty burden, on which so much of the weal of this realm depends, let me tell you, and often the weal of outsider Bedawins and Fellahs too. It would try an elephant. As she would look with pride sideways on her loads—the convex

side of the laterally bent neck would reveal the graceful curve of the collar-chain twice diagonal in the neck:—first, quite unmistakably, so that its knee below is visible, in the devoted dip; then, more vaguely, aspiring. She not only carries relief, but her very look is restoring and inspiriting. She is now as Cinderella at the ball. But what cruel stories I heard about her! I tremble to think what she may again become in obscurity. O, had I been by when that slave whom her very breeder had enfranchised, tried to snatch away from her even that teasingly small bundle of dhurra-straw to which her ration was already reduced! Almost every one of these camels has its memories. But I could never tell stories: it implies the habit of prying into particular people's affairs, of boasting *indirectly* in a canting way, &c. But this care about Cinderella made my nerves quiver. She is out of harm's-way for the present, and, I hope, will continue so. She is young yet, and will still develop, until in proper season, seeing the Princess-like fair beauty triced up in state towards her future mighty, brilliant Master, we may rejoice let us hope. Meanwhile, I think, we may trust Cinderella further to her own sense of devotion to those who appointed her carrier. But where on earth in these open places did you again get hold of these two ghazels hanging by your saddle-knob? Hey, my learned D.? The blood will spoil the delightfully undecided colour of the everlasting velvet porter's dress. . . . .

Let us cross over there, through these loosely straggling dignitaries, whose heads and necks suggest a procession with Roman fasces—axes or adzes peeping out of bundles of rods—emblems of authority.

Well, old Hâneffy, how goes the smoke? What is your talk about with valiant Sergeant Abd-ed-Dockân? . . . .

This grey-bearded faithful one of mine would shrewdly and independently calculate *νόστιμον ἦμαρ*—the day of our return to the river. You see he has his anxieties; but he deals with them separately—they are not suffered to accumulate. The aggregate of time hath passed over his tough, youthful frame and his features of gutta-percha, so little booked that he cannot tell his age. *Dem Glücklichen schlœgt keine Stunde*—the clock does not strike for a happy man. Behold Lord Beaconsfield's utopia in "Lothair" realized. Yet—to match contradictions—what would life have been to Great Ben barring Big Ben?

Hâneffy is often my dread despot, when he comes with his voice like muffled thunder to rouse me in the morning in my *θαλαμηγὸς*, or, as he calls it, *dahabeeyeh* (golden ship), that is to rouse me in my tent. His voice on such occasions is like that of my beloved dry-nurse —whose eyes I am reported to have gallantly compared to fresh prunes— when she assumed the deep voice of some Ogre. He makes us feel quite little and humble: a good thing in the morning—specially for people in such high positions as ourselves. But the veteran is often seen playful enough with the dahabeeyeh-cat or with the camp-monkey,

Do you know that it was this same Hâneffy of all the servants who contrived for us the surprising Christmas plum-pudding at Dongola? It was better than those made generally in England, though this is small praise. What Christmas trees those vast sycamores were for yielding presents when asked for through our guns. Doves they were.

White-robed Lieutenant Ahmet's bright little head-dress should be somewhat bulkier about the sides of the neck in order to resemble better the ancient Egyptian

fashion. He must see the dresses in Verdi's delightful "Aïda," and take some hints from Alma Tadema's pictures: and in time we may see a new regiment like some of the ancient ones—bearing perhaps the name of our esteemed friend. And if the noble youth were not at present so intense about English grammar and engineering sciences we might remind him that Brugsch Bey has already composed a Hieroglyphic grammar for the express use of the youth of Egypt. This, however, obliges me to remark, that I hope you are not of those who still think that the revival of Egyptian learning is only to blossom forth in some worthless curiosity of the rank of the promiscuous rubbish called bric-à-brac. But this goad would excite the eager effendi—and perhaps some one else—too much just at present. Among all his excellent qualities we had now rather let his recruiting capacity have play, by thoroughly enjoying a comic occurrence. We have only to keep our eyes open, as such episodes are frequent with us; and then we will rouse the noble dreamer to grateful attention. He looks like a true descendant of the ancient masters of this country: the physiognomy is unmistakable. The rod, too, in his hand, is bent like an Osiris' sceptre. His high saddle-knobs resemble the sacred cobra, with a head like a paddle-hitcher bent; his camel, the sacred Ibis; her saddle-trappings, its pendant wings; the tassels round its neck, papyrus flowers; the well distributed callosities, "cartouches;" her feet resemble lotuses much better than the ancient columns, which are merely inflated imitations.

But little hieroglyphic record of camels has yet been recovered, though the excellent animal would lend itself willingly enough to conciliations with archaic Egyptian forms. Without exhausting the play, I will

only remind you how much a modern Egyptian marriage-train with the mysterious and gorgeous tent on the "desert-ship's" back resembles the ancient processions in which the sacred Noah's Ark, with a similar awning, was carried on men's shoulders. Under our present latitude such a train conforms still more to the ancient "locks of youth," curved in the "line of beauty," on account of the resemblance of our Nubian Bedawin's hair, which is plaited thick from the forehead and temples. In W. Theed's group of "Africa" the ornamental nets of the camel's trappings are in the style of those ancient nets made of strings of beads found on the mummies. The camel-enthroned woman's hair is plaited in locks like that articulated feather, the camel's tail. And her head-dress or crown, made in imitation of a crooked beaked bird, with a long neck, harmonizes with the whole sitting camel exceeding well, as this head-gear looks the very miniature of her camel.

This little dark-skinned child, hardly four years old, in his red cap and blue robe, on the summit of the high-piled loads of the tallest camel, recalls one of the *Cambini* perched in shells and flowers hanging from the ornamental rafters over some newly-victorious Pharaoh's feasting company, on whom they kept pouring flowers.

Now watch this little fellow. He has just succeeded in stopping his Troy-subverting horse without first going out of the flow of the caravan, and without even turning his animal sideways. He passed the bridle rope under his little foot in order that, when pulling with all his little strength, the amused might of the grand camel should understand that her head was being pulled downwards. And look, down she does bring her fore-quarters

on her knees, as softly as she can when she so pleases to do. Have you noticed how much she bent all her legs, to prepare a shortened fall? At this moment she looks like a boat downwards bound on the side of a tall wave, the little boy keeping to his perch well on the shifting incline, like sylph Ariel on the apex of fair Belinda's card. Now the wave subsides and Belinda is once more settled, as if stretched to rest in an easy rocking-chair. I hope little Ariel will not hurt himself now by descending from the still precipitous height of the sitting camel. Where is his mother, I wonder? . . . . See, he is going to mount again. I see he has carefully hobbled the unique animal's doubled fore-legs beneath its neck. This is serious business. I say, this baby has done crying for the rest of its life, as it appears, though he does not seem very, very far from it. He is as cautious and silent as a captive mouse, as he proceeds, noticing with solemn promptitude the calm advice from his father, who is just slowly riding by, not over-dressed. The child just looks the picture of "Little Totty" of blessed nursery memory. Little Totty is the size of the beak of that prostrate swallow, which she is pitying, you may remember. Look! Now he desires to unhobble her leg, and at the same time, or sooner, to get a-top, with rein clutched. Ah, he has hit it. He mounts the height of her lowered neck, and will perform the first manœuvre while lying on his face. . . . . Do you notice with what a comically tender expression she, while waiting, looks, with head a little turned, at him, as he, still a little falteringly, climbs up all that steep mountain of her shoulder, back, saddle, and the bedding, till, flushed with satisfaction, he is properly nestled? Another camel once started up with the same child, so as to exhibit him

climbing up on her high shoulder, then in a vertic position, or worse. But this one has been behavin throughout like Bayard's horse, which grew or shrun according to which of the four sons was about t mount. There would not be a whit of this benignan patience if a grown man had been mounting, can assure you. If ever a camel is nervously impatien to flounce up, it is when being laden or mounted. Mos of the spills I saw were from the camel's too sudde assurgency before loads or riders were quite settled Now, now, after her magnanimity, up she shoots, wit the child, like that gigantic branch with doomed Pen theus from mighty Dionysos' hand. What a subjec the gold-coloured, gaudily-draped, huge camel, with th inlaying of the enamelled seven jewels, called callosities with the bright little gnome, and perhaps some smal animal in his charge—what a subject for a Benvenut Cellini! . . .

Here is a thicker crowd of these "clever" ships o Alcinous finding their own way. In all this crow there is no rude, no brutal jostling; neither load, no brute, nor man is hurt. The Bedawi feeling in m thinks meanly of the unspeakable styles of walkin among different kinds of hobble-de-hoy populace, mov ing along the bottom of the deep thoroughfares of bar barous Occidental towns; and I think of the "charge' of his Grace the Archbishop of Canterbury, recom mending the leading spirits to "resist the barbarism which, in the overflowing population . . . is apt t spring up side by side with the highest refinement.' You must have noticed what modest room a gentleman, or a ripe man in general, takes in walking; and, on the other hand, what a latitude an apprentice declared o age too soon is suffered to usurp! Essentially towns-

people are not, in our enlightened and charitable age, very urbane.

What a relief the perennial pic-nic of this well-bred, well-appointed free caravan is! Here we carry along with us food and drink, and company, and work, and sporting implements; nay, the sights themselves. No more "staffage" required here than those grand tints, fixed with a life-time's attention by Walton, and a few other painters.

Mohammed! Come nearer. I will tell you something, and you lay it up in your mind. Do you know what I did with that beautiful bird I shot the other day? . . . You saw me skin him? Very well. That is what I intend doing with you, if for a third time I see that heavy portmanteau of mine tied to and carried on top of the light one. Have you understood me? . . .

This fellow is my gentleman. He serves me now in the second campaign. He is the redoubted prince among all these servants. And that I might maltreat him nevertheless, I confess to my extravagance of paying him more than he would ask, or indeed double that which his colleagues get from my colleagues. He looks careless enough now seated on the thatch of rugs, surrounded by peaceful objects on his camel's roof; but this is his leisure time. Being in authority, besides being considered an authority, you see his familiar little face radiating on a small court of genuine admirers, both mounted and walking. Enthroned in the high cloud of his baggy trousers, joyous like a perfect chick of superior breed just emerging from the shell, he appears as straight-laced with stays as a desert postilion prepared to withstand the violent action of his four-legged high sandspout whirling over a hundred miles a day. Such rapid jolting frequently, in less tough mortals, causes

the ejection of blood from the mouth. The fellow seems just brightened up into holiday expression as he exposes his shaven skull to the cataract of vertical rays, while he turns in his hand the small gaudy turban, and disentangles the tassels of its wig-like back fringe. Then he crowns himself with the glittering silk wig, and, "having passed over many a country, thinks in his prudent mind, 'I was here, I was there,' and deliberates much"—

> . . . . ἐπὶ πολλὴν
> Γαῖαν ἐληλουθὼς, φρεσὶ πευκαλίμῃσι νοήσῃ
> Ἔνθ' εἴην, ἢ ἔνθα, μεμοινήσειε τε πολλά.—Ὀλ. ο 80, κ. τ. λ.

as the camel makes him shake his head. Finally he resolves to do something. Accordingly, from the nest of a small bag he takes a pinch of a substance looking like a brood of tiny grubs, confines them within a leaf of an apparently magic book, and turns the leaf into a chrysalis, pointed at one end, like the cocoons adorning our favourite thorn trees. Then, as if proceeding to breathe a sort of life into his charge, he introduces the pretty chrysalis under the pair of locusts "respectant," which he would call his moustaches. After having nursed for a moment the gift of Prometheus in the prismatic box converted into a wind-calm well, he dips his cocoon after it; and behold! how the joyous, winged puffs of smoke swarm off the cornucopia. As he listens to the gentle, cheerful singing of the burning grainy tobacco, not only sight, taste, and smell is gratified, but likewise the feeling of heat is mitigated. As this fellow has been, from youth, happiest when on a camel; so, as a good observer said, the play of his features—specially about the mouth—resembles that of his favourite beast. The type of his features, when smiling, I found surprisingly well expressed on the

archaic Greek statues of Idalium, as seen in the British Museum.

A-head of the hagiostome* Prince of Valets, a monkey is crouched behind a saddle, and while looking back upon the easy Nubian rogue, is perhaps as much over-awed by the latter's sparkling appearance as Lord Bulwer Lytton's hairy hero was by the glorious Gy,† who shone with an electric star on her forehead.

The poor monkey, too clever by two hands to be of any use, just like some ever glad genius, is constantly being tossed in the lofty corners: he tries hard to keep himself shaded by some of the pieces of stuff upon and about the saddle, one of which is the beautiful British Flag which usually crests my own haughty pavilion. On the same saddle a black boy is riding. The quadrumane in his charge is always eager to testify his attachment to good-mannered people; and he is the more comical from his lady-like meekness. His future destiny is to be a distinguished ornament to the London "Zoo."

The black "kid," with a merry boyish countenance —formerly a distinguished courtier about the Serene Governor-Pasha of Dar-Foor—is our friend E.'s page. He is dressed accordingly, but disdains to cover the curls of his somewhat pointed head. He has joined, now, the most thronged team of these gaunt hydraulic propellers, which are sandwiched between the most polymorphous loads. Two other dark boys are also rocking in the team. The second youth, of perhaps eight, now rejoicing in a blazing crimson robe, made from spare flag-stuff, was found naked, footsore, forlorn, exposed by a step-mother in a dreary valley haunted

* Oblique-mouthed. † In "The Coming Race."

by vultures. Both boys are destined to be brought up and educated properly, by some of our friends residing in Cairo. The horoscope bespeaks the first a General, the second a Prelate. The third boy, perhaps eleven, had run away from a possible slave-dealing caravan, to take refuge in our camp, which was strong and bold enough to refuse delivery. This boy's destiny is to be kidnapped from us also while staying at a large Nile-town. One of the boys has two or three caged and sacred ichneumons; the other has a free and profane monkey in charge. This ape, which is usually very wicked—anatomizing cigar-bundles, plagiarizing books, and so forth—appears now, behind the saddle, as quietly subdued by heat as his marble image at Lady Clinton's feet is hushed by sorrow on the mausoleum at Windsor. This worthy playfellow of mine, cheering many a meal, alarmed me once when encamped by beginning to resemble the mausoleal monkey rather too much. I gave him a black wasp to play with; but he ate it, and soon sank languidly back in his arm-chair. Fortunately there was a bottle of vinegar at hand, which I, in alarm, applied to his temples. He recovered as soon as the tapioca in milk was put on the table; and of his recovery I was made aware by a sudden box on the nose he rewarded me with. He is watching us now. Look how he opens his mouth! . . . Pooh! How little skilled you are, Koko—just like you geniuses. Now you are ready to cry for those buns you missed catching; though I don't see why you could not let yourself down the camel and be up again in a brace of shakes. On those ancient sculptures I saw a monkey, like you, climb up a giraffe's neck. But I daresay you are too proud, and think yourself the courted, learned monkey, which rode to the expectant court in council of the great Prince

of the Arabian Nights. Now, once more! open your mouth, imbecile!

He will not descend, and he will not climb. Why, Koko, I thought all monkeys are as clever as the one immortalised in Egyptian sculpture. Have you no ambition? No! Then let me appeal to your imagination, Koko. The monkey goes up the giraffe's fleshy beacon, which keeps quiet all the time. But when the monkey is just about to sit on the giraffe's head in order to lord it over the beacon's whole field of view, the lofty animal politely smiles and bows, and bows and bows, till the emblem of unimprovable intellectual perfection is put gently on the sand. And behold the might of the giraffe, as patient as a camel, bowing before the evil-mannered favourite of clever women. Another time, when the monkey will make itself conspicuous by exalting himself, the giraffe might gently shake his head and send the monkey spinning on a distant rock. This would teach the monkey manners; because, for the first time in his life, there would be something graceful about him: that is, the fine parabolic curve along which he would spin in falling. Pity this gracefulness should be like a swan's song, as it might break the obstinate quadrumane's neck. Poor monkey!

A negress, wife to one of the *καμηλήλαται*, is towing the first boy's poorly disciplined camel, which ultimately succeeds in shaking down the rough cage. And—

Hey! Woa then, Tally-ho! After the escaped egg-trackers, looking like furred arrows, the excited brown infantry are running ranged at first in a terrifying tail like a revengeful crocodile of fear-exaggerated length.—Well, this is good sport among, across, and beyond the tall legs of the camels, who look on interested, and either stopping here and there, or merely turning their heads.

"Light?" valiant Abd-es-Shadoof. Here is my weed. What a glossy camel you ride? Here, Haroon-al-Rashid-like Aswed, and you, celebrated Aboo-Kittâb try my renowned Korâni, equally fit for hooree-veil-like paper or camel-leg-like pipe. And—by my nerves!—here is even my pouch with sublime Stambooli. I appreciate your connoisseur smile, battle-smoked fellow.

Capital men, these three soldiers! With less than the intelligence, dash, skill, and stamina of these, and a fourth I have not seen yet to-day, I should never have set out or levelled, length and cross-wise, fifteen kilometres and more, a parching, joyous day, as I often did with such sport-like ease and pleasure to the last. And each of our friends behind and a-head would, no doubt, say as much for most of the other human six or five or four-in-hands, of this superior breed they specially trained and tried. Excuse my "shop;" but we could not pass for an ordinary caravan in the true sense of the word. The long, narrow boxes, the red or white flags on the motley poles alone would betray us. Those painted poles are moreover emblematic. Painted crimson, black, white, alternately, they might have been conquered from the foreheads of unicorns. And the natural haunts of the unicorns, like those of ourselves, are virgin soils. There are also the well tubes, looking, as see-sawing parts in the camel-loads, like the "chain-pins" in far-Eastern ladies' head dresses. We should also be betrayed by the tremendous cubuses of those light boxes, in each of which a busy chronometer dwells and works, suspended or rather intertended, like a spider in the centre of his web. We might perhaps be known even by our "pointed looks," as a rural landlady of mine once said, to my surprise, because I thought my way of looking rather dreamy and absent. The precious instruments,

leather-encased, and hung by straps to some nursing soldier's neck, might also be unmistakable.

The daily changing aspect of the other loads affords variety enough. Here is a longish file of rough deal boxes of provisions, solid, liquid, and gaseous; for we boast of a couple of dreadful soda-water-engines also. I call that spoiled water dreadful on account of its lacerating effect on uncorrupted palates—as compared with the gentle titillation from a certain class of natural fine-flavoured mineral waters. When there are several boxes on both sides of the saddle, the upper ones are fixed in a sloping position, and the lower ones, with a break, agreeable to the eye, hang and rub against the barrels of these animated stilts. The boxes are marked in colours, with emblems of owners and symbols of contents: perfect pictures. The whole range, thus far, looks like a vista through a long picture gallery on a students' day. There are the panes, tall easels with divergent legs, camel-hair brushes of the soft feet, sticks, men perched high. Then, multiform trunks and portmanteaux—some built expressly for camel-travelling. These latter are vaulted, deep, not too long, and strong with sundry ribs—marked, perhaps, with a lamented name.* Others are armour-plated with refulgent sheet-iron, against those animal torpedoes the white termites; and these metal-cased receptacles are warped in various ways by the heat, like the soil itself. Among the softer packages are some exceptional carpet bags, but most of the bags are rough: those, for instance, which hold tent carpets, tent pegs, and such like. On the deep clothes bags, well-known to British travellers, and which were once canvas, patches of different leathers and native skins have gradually encroached and superseded

* Münzinger Pasha.

the original material—changing all the time like the living camels' coats of greatly differing value.* Huge square drab sacks of palm-leaves or grass-ropes, holding native corn or dry bread—which sounds so terrible to civilization-chained tender people—are, perhaps, topped in an alarming manner by a pair of capacious vases of cooking grease or oil. These jars are stopped and hooded with clay, and are hung only by one crockery arm each—in apparent danger from the legs or frame of the rigid bedstead with its screen of narrow hairy ghazel straps, which appears chiefly to see-saw crossways. At a happy time such an entire arrangement was supporting a rough coop with poultry in involuntary flutter of distress. Scattered or grouped are camels laden with clusters of dark flat square iron chests, flattened cylinders of kegs and barrels of shining tin, headless black animals [smoked or tarred skins of ghazel chiefly]; bottles of glass, wood, gutta-percha, and leather: all these are used for water. The same camels usually carry also the spades for digging the wells, and the other implements required for obtaining water. Camels specially devoted to carry the water have the same name as the irrigating water-wheels, with their rosaries of pots on the river. Those venerable *arrosoirs* with their wreaths of pink pots—in form, when descending empty, of rose-buds, when ascending full, of a cow's full udder—might well have been the first types of those chaplets of piety, which, by their circulating beads of compressed rose leaves, were intended to quench the thirst of souls with the supreme water mentioned at a

* According to breed, age, treatment, and season. Geoffroy de Sainte Hilaire refers, in the fourth edition of his excellent book "Acclimatation des Animaux Utiles," to the experiences of a distinguished French manufacturer.

desert well.—As a change from the ductile rugs and blankets and worn sheep and goat skins, the stiff sets of hides, with varied horns, stand out conspicuously: gladdening, through memories they agitate, the hearts of those who killed them from a distance, in a Paris-like fashion, first sneaking and then explosively bragging; and gladdening by their mere picturesqueness those also who boldly, in close combat, fell to, to eat them cooked at festive occasions.

I speak of the above as pleasant memories, because game did not fall in our way every week. Neither have we always been so happy as now when we boast of these Roman-nosed thick and long-tailed sheep trotting alongside the train. Nomads to buy from, or their flocks, are not always near; nor are the men always in a position to sell. Nor even when we had obtained such sheep would our fluctuating water-economy always enable us to supply them with the necessary water, even with such small modicums of soapy lotion as we were forced to be satisfied with for daily ablution. Here you see a pair of these oval metallic drums uncased, rocking on the top of heavier loads, and sounding like a subdued compromise between thunder and drums and bells. Their sound when thumped and shifted is very agreeable to my Bedawinized ears; and whenever I see one of these tubs I am tempted to thump it. Powm! Doesn't it sound glorious! I can understand now why that kind Arab colleague of mine delights in the creaking tunes of the water-wheels. I should not object to hear them now—near Zagazig, amongst my Kopht friends. Of the missed bell—not the English muffin-bell of Catholic funeral sound—we have here only the pretty shapes—in the feet of the light burdened riding camels. The accommodating,

silent feet of the burden camels have their form changed, you see. The feet of these natural carriers increase with their burden, and, by flattening into shapes resembling pairs of hammers, even their "heels" extend in the shape of reacting spurs, as if, even by this view, to encourage men who bear and toil much.

. . . Ah, the fowls, which we got on the banks of the river of Egypt, were a still greater rarity than game. I was long opposed to the aggressive fate of the "twice-born"* chanticleer, strange bard of married home and emblem of other battles. But at last, after his hareem had gone the way of all flesh, the effeminate wretch became as melancholy as the culpable Jackdaw of Rheims: instead of dutifully cheering us up, he being complimented as the bird of Mars, and being sometimes carried about as an example with armies in war! Well, this one did not look at all like those at the other end of the world, which Sir John Bowring so glowingly describes: the fault was, no doubt, in the treatment he received. However, he was as I say. I consented accordingly—reluctant, of course—to his exit from life for the sake of an "entrée"—with onions and lentils: lentils, to compensate for the loss of my inheritance of enjoying the golden bubbles of his song. At any rate, my bargain was better than that of some of those dust-gazers gone wrong, who, for a syringe-ful of mock-lentils would sell off their inheritance to a better world. One morning, the whole timorous chorus of fowl, cock and all, dropped from on high, and escaped. You ought to have seen these camel-men—four or five of them just in a batch like the ghazel—as they pursued the excited wings, in high excitement themselves, their snaky chevelure flying about, as if they were the very

* An epithet of the "egg-born" dove in the Mahabharata.

serpent-haired Eumenides and Gorgones. At last they caught them all by means of their plaids thrown over them like gigantic kites. May be it is to the ancestors of these same fellows that Perseus owes his Libyan spurs, and "Medusa"—I speak under correction and under awe from the ladies of Dahomey—may be a corruption of, or an improvement on, "Bedouin."

. . . . Yes, we are glad enough to have been able to keep up a small supply of exquisite desert milk at least—for all fresh provisions. Only these few camel-headed goats are very intermittent. There were times when the horns of each goat were a dilemma. We were told that if they are let browse their milk will be spent in the fatigue in walking; if, on the other hand, they are made into camel-loads, they cannot yield milk for want of pasture. But as this happened when somebody took a fancy to the sucking wild-cow now with us, it is just possible that this young monster is secretly provided with more wet-nurses than the one which confessedly passes for such. The fact that the wild-cow is twice the size of its alleged nurse increases greatly the suspicion in this case. Anyhow, this case is but a poor pendant to the canine nurse of Landseer's lion. The life kept glimmering in this awkward brute by the aqueous butter of the goats is fated to be extinguished by a surfeit from sappy greens on the River.

Let us cross over again. This advancing corps affords a splendid spectacle, as if of wattled giant turkeys with their tails a-fan. Those nearest, however, present, in the forms and proportions of their fore-quarters, the purest types of Pointed Arches ever designed—with the saddled loads for hood-mouldings or conjugate pelecuous blocks. Those with the boxes are the models

of complete barbacans, or of high—so-called—Gothic porches with pairs of bartizans. There again, two appear like a twin louvre, and almost like lancet-windows—the head of the one, somewhat fore-shortened as it appears, looking like a spandrel between. Farther back in the body, about the hump, the outlines greet you as those of flowing tracery. And now, as we turn forward again, the side-view of this lean-humped, unsaddled beauty presents an exquisite Tudor-arch. Others appear as ordinary four-centered arches; and the tall saddle-knobs, or rather saddle-pins, are very pretty pinnacles with poppy-headed finials. Did you not observe on the Nile how completely these lofty animals fit into the narrow avenues of airy palm-trees with their tops of synclinal fan-tracery? Who knows whether the first pointed arches, built thousands of years ago in the land of camels, were not formed in close imitation of these much-supporting animals. The large quilt, gaudy with the pattern of a tinted Cathedral-window, on the top of yonder camel's load, is a very suitable drapery; and, when seen during the sonorous concert, though *not* "heard for miles," of a loading or an unloading caravan, easily lures you into the belief that you hear the grand organ in a colossal "Gothic" abbey.

This harmonizing of the camel's shape with architectural design in the Orient seems merely one instance in a general law. I am thinking of the levelling tendency of Nature, which compensates in relative height for altitude. Animals, plants, architecture, all seem to conform to the law: pyramids, elephants, obelisks, giraffes, palm-trees, minarets, grasses, and wading birds. And the camel, carrying a mountain on a body tall and narrow, and with the broad feet of a wading bird, and knotty thin legs like grasses, seems

to combine more forms of this compensation in itself than I will further detail. This levelling tendency of nature is the only explanation I could give to an irritated friend, who asked me, why do all the tallest men of the United Kingdom keep walking in everybody's way in the London Strand? It is their fate, you see, being so tall, to keep in low places.

. . . What is the matter, incensed Arbâ? Doesn't he look splendid, with his apparently nicely trimmed moustaches and beard, as he frightens away from the small green bush the laggard animal, adorned sporadically with patches of hair, as this tract of land is with "box?" The incumbent horns into which the man's hair is trained form a natural helmet, more proof against sword-blows than the loose hair-tufts on the head-pieces of the Horse Guards. His drab-coloured plaid, now round his dusky groin, is a pendant to this sandy alluvium between the dun porphyry hills out of which this man seems to be formed. His dark, high and narrow shield, in the shape of a crocodile's back, hangs at rest by the saddle, along with the ghazel-traps —contrived in imitation of the desert scolopendra coiled into a terribly engaging ring. At rest hangs also his flame-like, straight sword in its leather-sheath—forged in imitation of the flat tail of his camel. In his hand he only carries a short, thin spear, with tip rough-edged, as if contributed by a straight-horned antelope, and afterwards metallified. Tied with a snake, a little above his left elbow, is his ostrich-beak-like dagger—and a small tortoise which conceals his charm. The leather soles, tied in a simple fashion to his feet, are like, and may be made of, the leather from the foot of a camel. The man's noisy upbraiding of his camel is followed by the obedient clatter and ding

of sooty pans and kettles against the rattling boxes which complete the load of the quadruped—which now bolts forward to find safety in society, like so many other culprits.

O! the sudden rushing of this camel into the way of Petro's animal, who came posting along the flank of the caravan! Petro is thrown from his elevated seat! Fortunately he springs unhurt from the sand. Arbâ has run to assist, while Bootroos—as the youth is called by these soft speaking Arabs—is madly chasing his expanded umbrella, or rather mine, which—a round shield stuck on a sword—usually shields him from the sun's javelins. For that umbrella is now exulting and gamboling in high glee, as it plays leap-frog with the lower wind. Bootroos has the consolation of not having fallen alone, as the small lunch-tent, field-bottles, water-skin, gun, a metallic "canteen" with somebody's elaborate lunch or "midnight-tea," and the saddle too, have been spilt with the rider:

[illegible]

("And as he fell he made a crash, and his arms rang on him.")—Don't get too tired, O Petro, with whipping that brute so unmercifully: you will soon have occasion to do it again—spill and all. These servants will not get girths to the padded gable-roofs of their saddles. These pack-saddles without girths look threateningly unsafe; and some justify their appearance,—at times when the humps subside and are not high enough to serve as a safe support for the centres of gravity: especially when these are not low enough, through a risky piling of goods. But with riders, ungirt saddles are bad at all times: because their centres of gravity are almost invariably above the hump.

There is a melancholy instance of a straggling, solitary wretch who lost her hump, and therefore dropped her loads too, in ascending this dry bank. She is like a professional man out of work, who loses in such plight his enjoyments, or the relish for them at any rate—while constantly tempted to spend more than while he was fully employed. The dropped loads are broken, too. A few drivers rush to, and some riders also gallop towards the scene of the catastrophe. Of the culpable gammâl's ("camel farmer's") whereabouts we are easily made aware. The clapping blows dealt with the flat tongues of his gossips or dismounted servants; the lashes from a soldier's round whip resounding on his flesh—but which I wish to damp, *οὐ πρᾴως οὐδὲ προτρεπτικῶς* (not softly nor persuasively); all these guide our quiet glance, which, though it is a bar to further blows, apparently pierces like a broach the culprit, who turns as if being roasted by his burning shame and regret. The appearance alone of the height of our authority just at this fatal juncture would have been crushing enough to natures hardened more than this soft-hearted and now remorse-eaten wretch. . . .

But, as wounds heal easily in this warm and dry climate, so, in the caravan, is sorrow short-lived, to compensate for its poignant intensity. After some carpentering to keep the broken contents together, some care to consolidate his advancing camel-batch, the application of the biting plaister of self-reproach to constringe the vagrant feelings and thoughts—the ever-youthful Bedawi had caused the accident by gossipping about fair woman—he soon presses onwards, collected and fresh, as if urged on by some personal motive.

Our Aâsharah, then, after continuing for some time to push on, at last overtakes the supreme group of his

wishes, with his charges kept herded well together this time. And behold Aâsharah, him, brightening up in unmistakable beatitude! There is a camel without saddle and load, a camel which—not to say more about it—would be much the better for some days' complete rest, but which nobly holds up her suffering head notwithstanding—though not quite like her master Aâsharah. But both man and beast look forward intently to one point—as if their lives depended on it. This point is the Flower of the Hamleh: * a gigantic Fleur-de-Luce, gently shaken as if by Zephyr, on the flank of the caravan, as if on the edge of a river. The first limbus of the corolla is the head of yonder most remarkably laden, saffron-coloured camel. The second blade of the Iris is the head of a big goat in a bag. This goat, with some waterskins, counterweighs the third petal. This third petal, most precious of all, has an attendant in a vigorous and active young man—who himself is, of course, the galeate top-part of the whole Iris thus completely described. It requires all the skill of the muscular youth to keep the new-born, saffron camel comfortable in the large bag. Isn't it pretty—à croquer! What large eyes! They are quite open or quite shut, like a Southern window or door, or like a child-like heart. The colt looks very vigorous, on account of the uniform thick fur all along its long neck. What a frolic for that posse of boys when they shall have come up!

Our persistent journeys seem to tell on Roobah, one of the ancient guides. But why does he not ride? He says it makes no difference in fatigue, and when he feels very, very bad, "il se constitue malade," lies

* Hamleh is one of the many Arabic names for camel-caravans, and the one most frequently applied to our own.

down on the ground—on his face, on his back, then on his side: to rise again, after a little while, as fresh and young as ever. . . . . Now this youth, his great-grandchild, has done dancing askoliasmus* on him. . . Oh, hoary fellow, are you quite so nimble as that? By Pan, the askoliasmus has quickened his leaven (or fired the wine of his veins into clear and sparkling age), and his leaven has puffed him up to rise quite proud! Nay, see him perform this consummate war-dance in a masterly style—flourishing the short stick with the modest youngster, as a *vis-à-vis* in this "pas de deux." The old Pan—often, in good weather, without any clothes to speak of—would have pleased, nay, delighted, my Lord Chesterfield: so much dignity, decorum, grace, ay, grace and *brio* is there in this feat. As for the stamina alone, the old courtier is no exception among his contemporaries. I saw two others of these nimble old boys, of untold years, not a hundred years ago, or a hundred miles from this caravan either, laughing, and playfully wrestling on the skirts of a desert haven. One of them had his white mane not only unplaited, but perfectly aspergilliform—reminding me of what I once used to admire as a fascinating work of Art: the dear old nursery picture, the portrait of redoubtable "Shock-headed Peter," with the satellite stars of his wide-radiating fingers. That shock-headed one—O my gentle Synesius!—I did not know the next day. His radiancy was gone—ay, gone! Under the privacy of the smallest of caps—scarcely big enough to call a turban—his diminished head was discovered and pointed out to us. So, after all, he did not escape me. Nor did he escape certain rumours: rumours usually consequent on sudden movements or removals,

* Ancient Greek dance on a wine-skin.

especially of greatness. They said: There being a scarcity of water for sprinklings, he sacrificed the aspergill itself to the infernal demons at the importunate calls of certain officious messengers. It is a delicate matter, and I refrained from inquiring into it, *bien que* I was curious. Because the geographical distribution of these messengers—which would "make a little cover," like Dido, "too much"*—was set down, by the learned and eloquent French authority on the Sahara, as not extending so far South as our observations. Here is another of these strong, upright old men riding, the bald top of his otherwise grey head serving for a polished anvil from which the sun's powerfully striking rays seem to spend themselves in shivered sparks. His having been kept, for a fortnight, in the dark by some friendly and retired tribe, near our operations, fledged a report about the violent light having dazzled even his shining mind. He is all right now; but as funny as ever: "Mahloooooo . . . . . m ! ! ! Ahŏ ! ahŏ ! ahŏ ! ahŏ !" Have I caught your accent, eh?—the oxytone ultimate abrupt, and the long-drawn syllables of the far-speaking sons of the sound-pinching desert. Where is your chibook, my venerable Guiding Star, old Never-say-die! Give us a pipeful of tobacco. Here is a good guide. Yes, even like unto a guiding star, so lofty and grand is he in the puzzling vagueness of his anxiously-watched indications. Sometimes he would descend from the zenith of his camel, and make himself quite small and obscure, like a star humbly going to efface himself near the horizon—the level of our meaner understanding. There, settled on the ground, he would, in the obedient sand, mould relief for us, that is, a relief-

* "Travels through Syria, Palestine, and Greece," by Dean S. Smith, in a happily conceived series of parish sermons, a little prejudiced.

map, a world in miniature. And having thus imitated a Titan, he would, strictly in the right direction, displace Mount Athos, fashion Olympus, top it with Pelion, and finally, bed our panting and vast curiosity into a miniature of the Grand Valley of Kings —Wady-el-Milk. Sometimes his truly wiseacre-like elucidations make us strain our eyes so intently upon the most blinding and fairest valley of this dazzling desert that we feel left completely in the Dark! That great resplendent Torrent Bed in this darkened Continent has become for us the River Styx. And as we are desirous to be conducted at last among the Shades, we must accept the Old Man for our πορθμεύς. The Grinning Man hath us in his power. He has already, though imperceptibly at first, made us divest ourselves completely of all our former notions. He has got us here, and no mistake. Well, well. Lead on, then. But give us first the ladder that we may embark in the saddle of our sublime camel! O, Camel! it is thou who hast saved us: I trust to thy instinctive wisdom which, piloting us, infallibly finds the place where, upon the humble knocking with our good steel spades, the gate of waters will be opened to us. Inshallah! We only want a small opening—not bigger than a needle's eye, or the pores in our mothers' paps.

RECONNOITRING AND MANŒUVRING OPERATIONS.

THE high-mounted gentlemen who have been all introduced to you look leisurely enough now: even those of them who are perched on the pinnacled and steep sloping saddles, like so many studious angels on gigantic lecterns. They look rather comical to me, as I think of an old bronze showing a rider reading, and his beast's head turned round and near to the pages, as if anxious to read also. Still it were a pity to disturb even this one at our elbow, as he is absorbedly and gravely nodding approval over a book he holds in the delicate, small, but "strong hand that manages the mighty camel:" while the other noble hand—if not just engaged in making a note—is floating about his eyes, as if to bless the author, but in reality deferentially to manage the sun with the insisting geste of an Old Egyptian prayer. The book looks, on this desert ship, like a sail: and acts as such, by quickening the passage. And if it were an Arabic grammar it would not only help to pass the time, but it would accelerate the student's attaining whatever his objects be among the people of the country.

But these gentlemen have not always been thus leisurely. . . . Holloa! what's up? Our noble friend,

F., usually gentle, is tearing along in wild excitement in the act of over-taming his high-spirited but gentle camel. F., you will make a general stampede of the caravan. I dare say you are just fresh from having—in solitary places away from the caravan—repeatedly brought her down to lash her into uncongenial silence: an improper proceeding. This camel was much gentler when, one morning, it just embraced our friend's arm between her jaws: gentler because, you see, his arm is not amputated. If I could not agree with my camel in a reasonable time, I should not consider myself wedded to her, were she as excellent as this one of Mr. F. I hope you don't mind my telling you, old man. Try for a few days a slow and quiet camel, and keep chiefly with the caravan. Both yourself and the camel is exhausted, for we travelled for a week like driven slaves, with hardly any sleep. This is the man ——now, never mind, as you can never mend her—— this is he who, having been told there are six thousand expressions in Arabic referring to camels, answered—hopelessly dead to appreciation—that he has called this one camel more than six thousand names in plain English. Shocking!

No, we were certainly not always so leisurely. Not that we had yet been attacked by any of the desert tribes of men, as Vertomanus was in the dawn of the Sixteenth Century, whose little party had to fight once twenty-four thousand Arabians who came to ask money for water. Nor were any of our civilized camels ravished by wing-footed lovers belonging to piratical free camel-herds—as often happens in Tibet, according to Colonel Perjevalski or Colonel Yule: though the two friends don't agree in everything. But the fact is, that we spent the bulk of our time in wholesome work.

There was one kind of work with which we kept racing all day, the whole caravan racing within itself—and we called this peaceful manœuvre Camel Survey. For not only the observations were usually made from camel-back in the caravan; but also because in several of these cursory surveys the distances between the points of reference were computed from the intervals of time and the caravan's even pace.

A second operation, the most conspicuous, however, was that in which everybody could freely change the pace of his camel. The aspect of this manœuvre would have pleased you for a short time. At times in rear, at others ahead, again in the middle of the caravan, a brilliant long thread would be visible, refulgent with shifting foci. There were the four mounted geographers, conspicuous with their light helmets on high, like snowy peaks. Sometimes one or another of these exalted beings suddenly subsided, in order to complete his observations and calculations, and sketches on foot,—whenever his animated observatory fell useless by becoming itself the fidgety observer of some tuft of inviting Halfah grass. Very exciting was the intent hide-and-seek of the active signalmen, running or riding with their flags through the caravan; and stopping now and then to cast catharine-wheels with their flags at points marked by prompt notes on paper, and pressed down with letter-weights of stone or handfuls of sand. At times, there was a greater disturbance among the caravan, when the rattling snake of a monstrous long chain, running along a given direction, cried aloud through the mouths of its team of soldiers for elbow room and clearness ahead. The steps of this survey—as I venture to call the successive operations at the transitory "stations"—were about five

hundred yards or longer. You might have called the whole business a clock-work arrangement, considering that it consists of the "engrenage" [allow me this word for "catch"] of such cylinders as a mariner's compass, aneroids, thermometers, telescopes, cylindrical pocket-sextants, watches, a pivoted table, at one time the perambulating measuring wheel as high as a bicycle—and called, on account of its quaint sounds, the baby—pencils, rolls of paper, flag poles, and the like. The "engrenage" of these phalanges among themselves, as well as with the three coats of the terrestrial "nut" is, of course, further connected with the celestial mechanism through the pivot at Greenwich: thanks to the immortal astronomers of the past, and the indispensable help of our contemporary prophets at Kew and Greenwich, prophets hardly esteemed at home even by ourselves while at home.

The third programme of the races, however, during the six or seven months we were overcoming the most important portion of the work, was more various than the first two; for the third programme contained two races daily, and sometimes three. But we are in the midst of the caravan; let us get to this flank. What should "fire" have to do with this pebble, indefatigable Aboo-Dyemel? Ah, I see! You want "*a* light," as the classic phrase is. Give it to me for a moment, untiring Ibn-es-Shams. Look at this sandstone of three inches length, my gentle companion. The rough stone is admirable for its resemblance to a camel's head. But who would think, looking at it from a distance, that it is a complete pipe? The skull is hollowed out for the bowl, and the muzzle is well and wide bored like an Oriental amber mouth-piece; the camel's upper lip is made to repose, of course, on the smoker's nether

lip. Good. Here is your amorous amadou, flirting with fire, sporting with sparks, tender tinder.

Well, about the appearance of this other desert work. The pioneer race used to start with the sun, in the hottest season, when we, effeminate wretches, thought it best to cease being fried by two in the afternoon; after which time we submitted to the pleasant change of being stewed in tents; *entrée* after the *róti*. During the other season, when we worked till sunset—with lunch "in the field"—we also rose with the sun: but remember the sun rises till noon. About twenty-five or thirty men, and a few camels, constituted the athletic census. A jackal—the last one frightened from the neighbourhood of the camp—usually ran for a Derby-dog. If there was any one among the four well-interworking castes of the motley party, with so little regulated brains and heart as to desire acting on the ass's-race principle, it soon found itself saddled accordingly. There, then, are the apod (legless) tape-worms of the chains, eager to get a-head by stretching onwards in the heat; so that they had even to be checked, perhaps, by cooled standards. There are endless files of pedicellate or one-legged zoophytes. Of these one-legged ones, there are several species worth particular notice. And first the motley flags. Further, just graduated, and consequently conceited staves, exhibiting numbers, sometimes shaking their heads in a morosely top-heavy manner, as if the rigid general standard of what they call their learning were too much for their brains. Next in order the pedicellate pegs appear; audibly groaning as they are being malleted down; often liberating themselves with their arms freed by double oppression, and sometimes even derisively killing by splitting the tremendous but injudicious

mallet which, being of low origin—a root—has savagely striven to trample down the weak children of its former lofty "oppressors," the branches. Conspicuous by the joyous flutter of crimson and white ribands, the pennanted chain-pins with their upright rings race on, overtake, and are caught up in exciting turns: in the manner of the flags, but with a minced and quicker pace. An authoritative-looking succession of tiny sign posts holding between their teeth little paper tablets are established for a permanency to record our achievements to coming racing generations. But why should we make such melancholy reflections? They may serve to guide and cheer us ourselves at some future time. Γένοιτο, γένοιτο. Intermanaging appear the two-legged tribe of men in all the glory of their brilliant variety of shape and movement. Most conspicuous among these are naturally the commanding servants of Venus Urania. They resemble the Egyptian idol Thoth, who observes a balance suspended on a stick, which is planted in the ground, while he is writing on a peach. Now comes the infusion of another element to note. It is the three-legged seal-tribe of optical instruments, incapable of living apart from the levelling element. Finally, the four-legged camels enter the lists in a variety of attitudes—ridden, led, or waiting.

Such were the competitors.

Our four-legged companions have already shown themselves engineers by the evenness of their pace, and the evenness in the selection of their roads—regulated and set out, for aught we know, by means of that partition of the stomach, which may act both as pendulum and water-level. They seemed unremittingly to watch us, and perhaps over us, with

those calm looks of natural superiority, out of and down from the prominent and hooded dormer-windows of their beautiful eyes, set over the commanding, stately neck. And as they over-looked and over-saw us, and sometimes uttered their dear grunt—of approval, let me tell you; I sometimes have felt as though being coached for a boat-race by an equestrian trainer—who, contrary to the ruling vice of his caste, keeps his greater garrulity against the time when the crew are refreshing themselves under shelter. The quickness of the camel to rise, and its occasional nightly rumination, reminded us of the griffin,—whom we may claim, for its promptitude and vigilance, as an emblem of our own nocturnal work of "plotting" and star-trapping. Indeed, our impatient risings to the stars are as offsets to our being chained by day to the ground. But envious people, who are usually lazy both of heart and brain, may call these irrepressible aspirations of ours the crowning of that "impudence" which pushes us, as an Hungarian epic and heroico-comic poet says, in jest, "to load our own sweet mother with chains."

In the progress of the whole party described, through all the diversity in kind, and difference between the strides of twenty, and, say, a thousand yards in length, you would soon have noticed the four or five communities of crews—each pushing on hard in emulation—and the harmony of their paces. Having gradually mastered so much, you would have seen what there was of racing, and what of other movements, subject to laws, fluctuations, and disturbances. And, after having observed a whole series of these "runs"—we say we "run" our chains, our levels, our theodolites*—you would have been able to

* Future editors of Webster's dictionary—if, after Dr. Murray's

reduce all this bustle into yet simpler form, as the purely human traits would have risen into relief—such as the nature and degree of the leader's gift for organization. At last, perhaps after dreaming a little of the beauty of this supreme, delicate, and complex talent, the analysis of the power and niceties of which, in instances where properly treated, is such a charm in history and biography, you would have found yourself actually engaged as judge of the spirit and result of our performance. May be, you might have compared the features characteristic of our work—of everybody's and everything's turning at intervals—either to the convulsive writhings, painful to behold, of Pope's "wounded snake" that "drags its slow length along," or to the easy evolutions of a set of progressive dances performed by accomplished people of sporting habits, in sweet obedience to rhythm and harmony.

To have done with this fascinating subject of administration, let us drink the health of such sovereigns, "sub-kings," princes, spiritual and temporal, not forgetting even boards and other powers, who are well impressed by the duty of sparing no pains in studying human nature, and in hunting for, and selecting leaders of men. I have got cocoa in this flat bottle, kept hot all the time in this temperature, but others carry liquors which in this same heat—not during the season of hot winds—keep very cool, thanks to the evaporation from the soaked, felt coats of all these small bottles. But whatever you have got in your bottle, eat some biscuit before drinking.

You see that airily-dressed gentleman with the

coming great work such should be published—may just leave out of the etymology of this word the facetious explanation θέω δολιχός—"I *run* long."

tasseled red cap, riding on His Eminence—bald ca
are called "bishops"—under his umbrella. This sh
be made of, lined, or covered with thick quilt, light
or, best of all, ostrich feathers, such as those their R
Highnesses the Egyptian Princesses used to have.
would not trust to less than some of these, or a pr
helmet. This is the lieutenant who used to be in ch
of camp and caravan—whatever there was left of eithe
while his compeer was at work with us. In ha
less than three or four hours after our own start
caught up to us. There being fewer men left in ca
than when we all travel together, packing took tl
somewhat longer. This coming up of theirs was
second race of our daily programme: that is,
appearance of the caravan tempting our working
to unite in one grand spurt, with a view to keep up w
parts of them as long as possible. What a subject
would have been for a Pindar, to describe as racing
very *κάμπαι* (goals), for such were the *camps* with
camels, whose front and back view, as appearing to
is metæ or cypress-like. We fanned ourselves with
belief that the caravan were afraid of our speed,
that they put on extra spurts in our honour: whic
very possible, because they might just have reflec
how ignominious it would be for them to let us ar
at the camping-ground before it should have been
pared for our reception. Besides, there was this rea
for our spurting, that the caravan was itself our la
scape, as long as it remained above the horizon. A
I am not sure whether we perverse people were
better pleased by the sight of our camels passing c
us like a good sand-slipper, than we should have b
by sights usually called romantic. I hate roma
places, overgrown landscape, and broken scene

which are so many obstacles to my busy theatre. Whereas, if a camel trespasses into the domain of my vision, and I have tried to ply—as the classic phrase is—"my noble" coolness by promptly turning the lafette, adjusting the vane, drawing the trigger, shooting the sight through the thicket of legs, checking and booking it—if I have done all this in vain, I sw— I can make the camel swerve easily in a trice. Well, considering the length of the caravan, we stretched and kept up with them usually for rather more than an hour, except when very thorny places impeded us with their hurdles; but we did not delay them much by following the compassionate compass-bearing and reaching in time the distance dictated to their leader by us as he passed. My own delight at these daily passages was like that of a timid boy's, who would eagerly trip along with a victorious regiment passing with colours, drums, fife, and bugles.

Less regular, and not so patent, were the movements of the third race of the daily programme; but these were as important as any, with much interest attached and thought bestowed on them. I mean the party on the road between our measured races and the last well behind, or the next ahead. Sometimes there were even two such watering-parties afloat in different phases, coming or going; while we ourselves were left working, shifting, and racing with reduced resources and in great expectation and anxiety.

Are you interested in the result of these perennial races? I will try to compress it for you in a nutshell, or a "cartouche." If this word were written, I should grasp it between quotation marks. The result of our toil is to be a quotation of this country. Our telescopes with the lenses are like cartouches. Through

them the Prince who has sent us will be able to read the whole hieroglyphic record of this realm. And as the revived study of the columns of hieroglyphics on stone and on papyri has begun to unite into one column-like canal for infusing more life into the systems of our present knowledge,—so our columns of engineering hieroglyphics on these rocks and the papyri of our note-books, when reduced to a "column" formed by a pair of rail-strings, may contribute a little to restore the public wealth of Egypt.

MARTIAL DISPLAY.

Are you getting tired? Change your position. I am glad you discarded your Soudani Venus-shell saddle, in which you cannot well change the crossed position of your cramped legs; it is a prison, and fit for slaves. Don't get too much used to riding in the single stirrup, ladies' fashion, either. Try a spell of riding side-saddle-ways on the right side, where there is no stirrup. Never mind that our camels, whether riding or baggage animals, are not treated and made worse with feminine or effeminate cruelty,* in the shape of a barbarous iron ring in their noses, at the mercy of amateur riders. [Our halters just embrace the "nose," like the accommodating belt on the noses of Arabian, bridle-less horses.] Or, hitch your left leg over the saddle-pin, and then cross it with the right, in leisurely and comfortable bends. But bring over first, for a foot-rest, the suspended scarlet-leather pillow slanting over her right shoulder, and adorned with a profusion of broad leather straps, gay with orange and carnation. That's it. But riding astride, ordinary horseback fashion—only without any stirrups—you will find the most pleasing position for long riding, especially when ambling fast.

* This refers to a celebrated passage about "woman's heel" in Major Whyte-Melville's "Riding Recollections."

Speaking of feet, and surveying yours, do you notice the exquisite resemblance to a human leg and foot of a walking camel's prow when stretched out? It is proper that this "travelling merchandize" (caravan) should move with the raised and floating leg of a running Hermes—with the sole inclined [toe bent downwards, as is natural during running]. Indeed, in its own animal kind, be it said—with due reverence to my funny dear teacher, Professor Blackie—the camel unites the thundering head of Jove, the sailorly wide chest of Neptune, and the grace of Mercury all over—*τὴν τοῦ Διὸς κεφαλὴν, τὰ στήθη τοῦ Ποσειδῶνος, καὶ τὴν τοῦ Ἑρμοῦ χάριν.* The Adam's apple in the camel's neck appears as the knee of the floating Hermes leg; the back of the inclined foot, with its vigorous curve, resembles the animal's lower jaw; the bent toes look like the curved lips; the two waves of the sole and heel, with the depression between, correspond with the double-arched head; and the ornamental little wings are represented by the small ears. Allow some latitude for the straps round the lower part of the athlete's masculine leg, for the purpose of equalizing somewhat the thickness.

. . . . . That square white thing? That is the litter, carried tandem-wise between a pair of excellent and beautiful animals, each properly attended. The litter, or rather, the ambulance, contains and contents the happiest man in the party: if we accept what Gasparo Gozzi says in his beautiful essay "Loda della convalescenza." He has happily emerged from the ordeal of Cholera Morbus. What a gloomy week that was in the Tophet-basin of miasmata in air, water, and food; where almost everybody was ailing, or alarmingly ill—the healer himself included. And as if these evils had not

been enough, even we, miasma-resisting ones, could hardly sleep by our ready weapons, for the frequent, wailing watch-words which were necessary in that place of desolation and execution. The only fine old tree in that place had to serve as gallows just three months before—and all the dozen villages around were again infested by murdering robbers. Nor was it refreshing in the mornings, as we came from our tents kept infected all night by the sewer gas of our dismissed breath, to which poison we are inured,—to receive the Job's messages to the purport that more wells have been ascertained to be drying up. However, these are past fermentations, and, bottled up and labelled, may serve to cheer us whenever a sigh of relief makes the cork of an actual pressure easingly jump up. It is well worth notice how even the cooks of the party contrived to study the invalids, especially this gravest one, by inventing dainties in that wilderness amongst enemies. Each of us, I am glad to boast, had his hand, head, or heart, in the operation of raising the fellow. The couch is my own open-air bedstead. It is destined to be broken—under the weight of the great double lengths of joined iron well-tubes, if not under the parallelopiped of the tent—but broken just when Mr. G. will be able to dispense with it.

Yes; he seems happy enough. I even dare say he is happier reclining in his place, than the mighty gouty Kublai Khân was in his magnificent chamber carried between a four-in-hand of elephants. And as that sovereign let fly his falcon, with prompt, succinct, and vigorous wings, at tortuous-throated emphatic cranes; so our friend amuses the rather trailing-winged hawk of his intellect by letting this raptorial bird survey the flight of crane-like fancies of a novel of the day.

You know that anything will please a convalescent, imagining himself as charitably disposed as a sucking monkey. I say, G. my pet; look out and look up. There is a rare flight of cranes above. It is this which caused me to make the novel comparison: perhaps by instinct; because, seeing the cranes, I feel like a falcon. And as I cannot pursue them bodily, let my mind fly off after their likeness, the novels. Listen:—

"Crane-like" these "fancies" usually are for the following reasons. Unlike our noble and prompt camels, it takes them a tantalizing and ridiculous set of cackling runs till they dare fly up to the height of their professed subject. Such a run might send a crocodile soaring. If this Japanese pet bird did not get his agreeable lifts by the fortnightly Japanese earthquakes, and further stimulus by the houses and stones toppling over its ears, it would, with all that length of wings, never have learnt to fly. (It may be—judging from the constant example—the Japanese will be the first to practically solve the problem of human flight.) The greater part of their soaring is done in obscurity; their chief trick of attraction is to keep us poor benighted readers in the dark. As we go on approaching the poles of science, the times of unintermittent lights appear to many people inconveniently protracted; so these novels become popular with their interesting darkness, or their moonshine—not always chaste like Diana, but more commonly perplexing by being as mysteriously changeful as the orbs of her Egyptian worshipped symbols, viz., the cats. [Black surroundings intensify the effect from the achievements of these juggling necromancers; just as their names, written by their automata, dazzle on their monuments for an enchanting moment.] Though they, by nature, are addicted to low

flights, specially during twilights favourable to double-appearance and other ambiguity; they, in broad lights, ostensibly float high: which they can do easily, since they live on as little as camels, and do not take offence at being called light, étourdis, &c. These conceits being light, their blowers are, of course, fond of marching them in a playful dancing fashion: each whim taking the lead by turns or overturns—behaving like this caravan, an organized sand-slipper, and these classic birds, all shanks, who taught the old Greeks, and perhaps the new Trojans in Paris also, to dance. [Shame they did not represent Terpsichore with a crane by her side!] . . . . . But as cranes can also be pugnacious, learned, and even wisely grave; so can novels: and what would you have more in this corner of the world than these four elements of erotic mirth, strengthening fight, eventually power-giving wit and learning, and balmy wisdom. For their pugnaciousness, witness the wars between novelists' craney humours and their "high-minded" pigmy fancies! For they fashion and dress all sorts of monsters in this imitating monkey age of palim-Phœnician quodlibet taste, which cherishes also Japanese cranes and even worse Scythian barbarisms. Witness, I say, their Punch-and-Judy shows, and tremble at beholding how the enormous amorous shafts from the retiring eyes behind the fringed shields and cunning bows (I mean the lids) of their female dolls succeed in breaking the sweet brittle spoons in which the male puppets surrender their hearts, instead of manfully attacking. Woe to them if the apod imbeciles be wounded; and woe to them, forty-times more woe, if graciously taken prisoners! Sometimes, however, these kitten-delighting woolly balls have as much cunning as that chariot-inventing monster, Erichthonius; although

even in that case, those harpooning hooks on long ropes . . . . but you will have read for yourself I fear, without much harm I hope. Like the good and prudent cranes friendly to Ibycus these fussy fancies (excuse the alliteration) are at great pains to find out all kinds of more or less lovely murderers. After so much excitement about all sorts of killing and other fascinating criminalities, you may well expect to hear of some havoc done by the love-philtres of cranes' brains among the tender-minded of the readers; for, as the cobbler of Canterbury saith, "as they read much of love, so, when they fall in love, there is no ho with them till they have their love," and so forth: whatever that "love" may be—a mania for display or mysteriousness, or any other inordinate affectation or gluttony for the futilities for the moment in fashion. If some persons think they can spell out from those conceits any knowledge worth the trouble of reading, let them rejoice in the old myth of poor Palamede, who was taught some letters by the Phœnician cranes who had picked them up here in Egypt; and let them share in the belief of those people who fancy that the shape of their flying columns exhibit elements of our alphabets. Without adducing the geranine shape of some archaic Greek types of two, and of one Egyptian form for the third, I hope to please by finishing with this, as I am gracefully going to descend to the level of our caravan, that some puzzling forms of the fourth Palamedic letter, the Ξ, will best show the lovely conformity of the flying bodies of our birds in three lines, with the repeated arrangement of novels in three volumes. There are more resemblances; but there is also a limit. Only *one* paragraph more about the moot "reason" of the vexing triad of these cobwebs, spun now-a-days so irrepressibly

by ladies and other women. Because they have no extent, substance, and weight as a basement, and are blown up by hot impulsive hurry like these sand-spouts, they can no more stand by themselves than the top-heavy trees growing here if rootless, or the icicle-shaped cocoons on them, or any pointed-bottomed vessel; hence the easy and étourdi pottering of a light, if not airy, triple vase, which I beg to call triang, inter-propped —each crutched by the other two—and thus, a marvel to behold. These three-pronged arrangements are well adapted to keep their footing on the surfaces of minds, how roughly prepared or warped soever: impressing, of course, pock-marks on the soft, scratching vilely the varnished ones, but gaining the least hold where they desire most, and where they often come to Narcissus' grief, to wit, on the hard, grainy, evenly polished, and reflecting minds.

Mr. H. calls our attention. . . . This is Mr. H. Now you have been introduced more or less to all the gentlemen of the party: the Effendis, and Messrs. A. to H. And the one following H., viz. I, the last—don't, O don't utter that sickeningly used compliment—I have been with you for some time lionising. I hope you are satisfied with the livery he wears to-day: shining multicoloured and long-tasseled heavy silk kerchief, pinned over the helmet so as to give it a due Crest; damask silk coat, on which the glittering arrays of all component changing pairs of colours keep chasing each other; what is visible of the rainbow of a sash, with pendant iridescent rain; wide, but not *quite* Oriental nether garment of satin, almost a Royal petticoat, with small openings for the feet. You see, the pattern of it represents a chessboard, with the shiftings of warlike play—in colours as if seen through a delusive near

evening rainbow. This wide garment is girt just l
the knees, whence the high stiff knickerbocker g
begin, coloured like the glittering golden sand of
Desert, broad-seamed with gay leather, with rov
shining spangles at the outer sides: down to
slenderest part of the leg; clasping the tiniest of y
boots, which sparkle with laces of pearls and butto
precious stones—Egyptian lapis lazuli and ruby.
whole is the glorious solution, at last, of the
problem to square the Rainbow. To assume the
sional style of "Jean Têterol, who hath an Idea" [t
of such a Man!] by Cherbuliez:—all these A
say of Us—as reported by Our amused friends, al
whom are Our superiors—that we are the "Ba
Mahandi(-z), that is, the Chief, under Solomon
the genii and all the Caravan united. All your a
ments would be useless for disabusing them. Our
geous appearance—and *they* know something besi
which is conclusive for these men. Well, yes: our w
beloved cousin wards our vision towards that upri
slender beauty walking this tremendous pace with e
a beauty in a sack—all but eyes. On head a gourd
hand, pendent, another. Captain Galton says wo
naturally prefer carrying to walking unencumbe
That is the same author who ignores Desert miserie
famine, water starvation, desertion of camels and n
marauders, dry wells, being lost in unknown paths, be
lured into perdition by mirage, and the great co
quences of every paltry mischance.

> Yet Captain Galton saith this is Civilization:
> And Captain Galton—is a very learned man.

Whatever common mismanagement can lead to in dese
the world has heard from the time when Sennacherib

Cambyses ventured therein, to our own days, when, between the Nile and the Red Sea, two telegraph engineers with four thousand camels perished, and scattered the material of civilization over these deserts, as I am told. But to our "moutons." Judging from the women I have actually known and well studied singly to my sorrow, our dear noble "Cousins and Sisters and Aunts" to wit, I have come to the conclusion that they are fond indeed of carrying away, in their carriages preferably,—preparatory to themselves wearing,—something new every day of the season from the shops. But there is something else, our noble relative, the Honourable Plantagenet H., *sub rosâ* pointed out. Where Beauty is, Valour can't be far: foe-dispersing, ally-increasing Sergeant Abd-el-Bekr, with the peak of his porphyry hood, has left this his newly-wedded fourth bride—fourth, yet without his ever having been a widower—has left her, just fifteen paces, floating before his camel for some time. This distance affords the proper visual angle for his purpose of admiration suitable to his altitude. O, Abd-el-Bekr is a born astronomer. Perhaps he means not only to admire, but also to watch her: perhaps the philosopher is right who said that women, to be of no harm, must be "continually" kept watched or chained. Perhaps by this means Abd-el-Bekr means also to keep his capacity for martial vigilance in trained condition. He knows best what he is about.

. . . . Scattered over this our wandering Island of Delos (which, with its temperature, might well have given birth to a sun-god, nay, both to Râ and Tûm *), you have then seen our friends, the sovereign princes of this passing confederate realm, riding single or in changing pairs. They all wear helmets of some sort—

* The rising and setting sun.

in the refreshing shapes of mushrooms, flat or high—as they will be protected, like members of other fire-brigades, against these candent beams cast from the sun's garrison and toppling about their ears; and they generally cover even these head-pieces, along with their necks and backs, in true testudo-fashion of close besiegers, against the fiery missiles from above. The thick pad over the spine, and under the coat, as Surgeon Myers wore it, is in beautiful keeping with the narrow and elegant camel-hump. The outer covers, thick, and either plain, quilted, or shaggy, and white, or motley and brilliant, are allowed to advance above and fence the cheeks against the violent sallies of oblique rays during calm afternoons. That heat is well described in "Lucile," by "Owen Meredith" (if I remember right):

> "Like a furnace, the fervid, intense occident
> From its hot seething levels a great flame struck up
> On the sick metal sky. . . . ."

This additional shrouding of the princely cheek means, then, a shroud for a defeated flank of the prince's surrounding phalanx: because the spirited musketry of the ventilating pores and the valiant brandishing of the films in the wind ceases, and the front of the infantry lie prostrate and huddled up in moist heaps. [O, how different was it forty years ago when, snow assailed the Bedawins who conquered that assailant in glee because they had room. The commanders, at that time, could keep their armies of ascending sparks and martial smoke and ashes round them at a workable distance: as they assailed and laughingly dissolved the limbs of the sparkling armies clad in futile silver.] However, it is better to be thus blockaded than to be fatally struck in the neck or even shaved on the nape by the raids of the

ar rays. In the latter case the marshalling Mind tself usually first unsettled, then laid prostrate. Then lows the quarrelling of the senses in office, the neglect the mutinizing sergeancy about the inner organs, and ally the more or less speedy general rout of the whole my of tissue-indued cells. Our own generals, thank odness, have been safe, up to this moment. One was ce close pressed indeed; but he was saved by the ompt, almost surgical treatment of an observing other just in the nick of time. But notice the conual skirmishes. Look at these battle-fields, red with lood, and white with bleaching bones, and covered as if nder funeral chalk: in the splendid language of Lord ytton's translation of the Serb "Battle of Kossova":

"Their bodies bleach in bloody mould."

They are fighting now: look. Can't you see the flying columns of our friends' hands? or the advance-guards of their lips and noses: all made red and raw and hot with their own blood—by the loss of skin. This skin has been and is being ruthlessly torn off by these old Egyptian sunbeam hands forked into five-pronged "harpagos" (the kitchen-forks of the Ancients for managing the stewing meat). And it is this lacerated skin which lies about after writhing, in coiling white "moslings," and which is here and there superseded by tissue-paper. There is a whole cigarette-paper bandaging yonder hero's wounded nose under his helmet, from the incumbent ventilating shaft of which a small ostrich-feather is nodding like Juvenal's exalted slave. He is well known in India as a ready hunter of tigers and alligators, and sure sticker of pigs; yet, as you must have noticed, his ever-mistrusted and therefore mutiny-ready camel is constantly being led by his squire.

Dreary, O, dreary! G., you are my "knight of the woeful countenance." But G., old fellow, I would not allow any one else to say as much. You remember the onslaughts on the British nation made by old General Reynolds? Poor fellow, he is dead now. This American friend of ours used to supplement each of his diatribes on British character with the clause, that he would be so far from allowing anyone else to say as much that he would *fight* for us: just as I for you, tender-hearted old humbug!

Please don't disturb the wounds by lilting any of your sallies as we ride by them; for the matter is serious. Though they all possess that ready cheerfulness which becomes well a succession of hot battles, they must not laugh—the dismantled chinks of bloodful trenches in their damaged lips would not improve by expansion.

You notice on the other side there, across the caravan, those princely coryphées we passed some time ago, coming up? You perceive the thick fluttering wrappers round those rein and whip-managing hands: those members look like ensign-bearers with their wounds tied up in treasured shreds of the flags. On this hand, the fellow to which rejoices in a newly washed white chamois glove, you see a gore-coloured thick "dog"-skin case, which, in the morning, before it thaws on the hand into a glove, is as hard as the rusty steel gauntlets its proprietor's ancestors used to wear once on a time. That important, though sometimes, unduly exalted department of the bodies which likes variety, but had better be kept from sudden change—the seat of the commissariat of stores and ammunitions—you see belted by thick and motley entrenchments of silk. Under everything, down to their ankles, they, very likely all of them, wear tight-fitting dresses of some soft chain

mail. Yet, through all these and more, the enemy made his alarming raids, espionages and underminings; and constantly aimed at the inmost vital parts of the camps: so that at times it is usual to serve out extra rations of bitter pills, I mean bullets and bitter powders, almost as regularly as rations of food. Will you lend me your camel-whip? [Mine, as my own camels do without, are all in the hands of those irregular jerky servants.] Thanks. . . . . Oh, it will be gone in an hour, along with the original smart which is only near the surface: I merely struck my thigh with the handle of your fan to drill these wretched sentinels of cells, which are, like the present semi-Oriental or central-Europeans, alternately lethargic and bacchanalian. The blows startled my surprised camel, too, into an irregular jolt, salutary to these skin-deep hull wretches.* Here, Gîrgîs, take my rug. Now the reduction of my saddle-pads, and a little trotting of a certain style—they have been gaining on us, too—will do the rest. Take your whip again. I hope to get—in order to freshen up this infantry—the electric field-telegraph of some flannel, too: which stuff I have not wanted below-hips since my winter campaign in Poland. . . . . Why, I have been treating this recently caught rheumatism or gout—or whatever physicians would term it—according to the precept in La Fontaine's fable of the "Gout and the Spider." [My wooden saddle, composed of two merry-thoughts and some ribs, is a proper pendant to the Peasant's mattress of maize stalks.] I wish La Fontaine had "stuck to the cows," and to the animals in general which teach men; and that he had studied camels better; and had left alone men and women

* "Sentinels," according to dictionaries, were originally the watchmen at the bottom and sides of ships.

whose beastly desires he dotingly describes; a
would have been well had he left Aphrodite alone.
description would transform the mythical sea-foan
something akin to the blushing nap of froth o
inflamed camel-stallion's lips: which froth "
rise" at unfortunate times, caused by unpurging n
and morbid solitude, and then—fortunately—"su
again." Yes, the forces of piercing cold wind
sudden frosty night-chills are rather Vandal-like
to us: the sun has better auxiliaries in the hot
discharging heated shrapnels. The heat, when it
tinues in action hotter than breath and blood thr
the nights also, seems to rush deep into the dark
of cells: making a gulping whirl of every pore, a
thirsting sponge of everybody. And as the imm
surviving thirst of that dead animal [I am speaki
the sponge] had kept it, while alive, degraded t
abyss of animal existence, by subduing and ensl
nearly all other appetites; so these cells, surrou
and hard beset, squeezed and wrung, are in open, ba
revolt—listlessly neglecting their functions—des
more and more to Drink. Or, the cells may be so p
stricken by the invading host, that they seem n
resolved to perish rather in internal brawls by their
or their friends' hands, by drowning themselves in d
warm by nature or by drinking the cooler bloo
the nobler ones among their own kin. With n
men it is this side paroxysm to scorch themselve
seething water or their throats by boiling coffee—
they "water" their favourite camels by feeding
with the glowing embers. Woe to those who are
under firm discipline. "Le monde appartient à la
cipline et aux disciplinés," says Cherbuliez, unknow
France; who says also, "L'homme qui n'a pas de be

devient tôt ou tard le maître de ceux qui en ont." We have a fresh French breeze now again, with only little sand drizzling from its wings; yet Sergeant Moosah (Moses), redoubtable athlete in the field among foes, and kind and ready Panurge, as well as exhilarating clown amongst friends, in camp, keeps his mouth and nostrils still muffled in a thick vizor. He thus economizes the coolness and vapour of his breath, by localizing an individual atmosphere: and, if I am not mistaken, he still keeps nursing a pebble in his mouth as a preventive against thirst. You see, he ultimately succeeds in finding relief by perpetually shaking his head with emphasis, as he keeps sitting askew the saddle—with both legs dangling on this side the altitude of his ground-despising Polar star. But "don't break your tender heart in pity for the horseman [and *à fortiori* camelman] because his feet hang," as the modern Greek proverb runs—Μὴ λυπᾶσαι τὸν καβαλλάρην πῶς κρέμονται τὰ ποδάριά του (if I remember right): you never commiserated my airy, lofty califourchon. During days across the irregular guerilla bands of horned snakes and spiky spiders, and unicorn scorpions, with their sneaking ways, hiding among the *chevaux de frise* of prickly high dry grass and spiny dwarf dry trees, you see the knights wear stout jambs, or greaves and buskins. Much desired, but not obtainable were leathern corselets for the sake of ventilation, perhaps in the style of a Roman corium, composed of fish-like scales (as another irony on this "sea of glass"), not too large to offer shelter to scorpions. I would not be surprised if the Viceroy of India should receive proposals of, and give sanction to, a Cobra Corps clad in complete leather-armour. The beginning, however, of leather dresses has been made, as you see: for the amber-coloured silk dress of yonder prince has been

overgrown by sundry large patches of chamois-c
ghazel leather. For the rest, you may feel refre
the sight of these British mountaineering and
especially rowing costumes in colours of differen
and crews: what was good on our boats on the
of Swans, is found very appropriate on these
necked "ships" over the sands and stones.
outfits, together with the reviewed modifications-
the variety which recalls gaudy tournaments. I
even seen, some time ago, a pair of black boot
a pair of black jack-boots—more appropriate foo
having been worn out.

The well-hung bodies of the spirited and ha
chargers are, you see, also caparisoned for action.
hide of this Animal—ennobled when first kneelin
fore Man—is, though very soft and pliable, nea
thick and strong as that of the pachyderms: it a
felt soft to my fingers. The rest of its natural
accoutrements seem the heirloom of a pedigree as
genous as that of the Greek or English nation.
variety of its food compriseth sweet, sour, and
plants, many of which are touched by no other
ruped.* In their food there is also the range betwee
extremes of hard bones and soft fat. Its bill of fare i
tainly more various than that of several barbarous B
nations of hardy men and women. Its weapons to
quer, and its implements to manage such a variety of
are various accordingly. Its proboscial muzzle—re
to that of pachyderms—and its hare-lips, as clev
a monkey's hands, convey its guarded and defe
booty to the partially edentate jaws and practi

* According to its bill of fare given by Baron Hammer-Purgstal
according to a deplorably off-hand summary in a note in *Nature* of
1875, about the camels reared in Nevada, U.S.

rodent teeth. The absence of horns, from this ruminant modified into intermammality, seems curiously compensated by the daggers of its cutting canines. Look how beautifully the hoof-substance, too, is distributed: recalling the armadillo tribe, on which it seems rather an ennobled improvement; because the substance appears as bucklers, more ornamental than large, over the exposed limbs and under the chest. These hoof-saving feet are very remarkable. The noiselessness of these livers of feet comes up to the highest perfection of animal feet: those of the carnivora. These feet remind me also of the swimming paws of certain mammals. What is left to protect the feet is merely these claw-like hooflets in front and on top of the eight free toes. These modest hooflets are shaped like the ice-breakers protecting the exposed piles which support bridges. But, in proportion and situation, these pretty hooflets correspond with the knobs or buttons in a Bedawin girl's pretty ears, a pair of which, as we have seen at the start, are an exact miniature of a camel's beautiful foot. The double vizors protecting its eye are matched by the muscular bars* in its nostrils. These can be shut like the blow-holes of the whale. The occult pumping through the auchenal (neck-) syphon, from the camel's treasured ancestral patrimony, acts in analogy to the whale's spouting. Moreover, the camel's reservoir which fits it to go above water a hundred times longer than we in dry heat, tallies with that blood-reservoir in the whale, which enables it to live under water a hundred times longer than man. The "panaché" heads of ours —with their aigrettes—look like those of a tercel of a gerfalcon, with an artistic nosegay erect on its nose; besides, my squires had care to caparison it cap-à-piè,

* Sphincter muscle.

like an ancient war-horse. Less gorgeously caparisoned, but carrying the united panoply of Europe and Bedawinia—pistols, rifle, gun, sword, spear, shield, if not bow—you see that one on which yonder renowned relative of ours is modestly riding. Their caparisoning reaches under the very soles of their feet. The state of the air—if very dry and scorching hot or scorching cold—and the state of the ground—if very wet and slippery—necessitates cameline sandals or shoes, tied or even sewn on: because these heroic animals have their Achilles heels. The myth which degrades the noble Peleïdes into an abject armadillo was not accepted by our dear father Homer—let it be said to those inclined to reflect my noble Lord Chesterfield's sneer at the hedge-heroes of Archaic Classics. But, with the camel, it is not unlikely that these vulnerable heels facilitated their first subversion to man. [If the heels slip too far sideways the little joined hind-legs split with the abdomen.] The elastic and thick pads may also explain why these animals never know when they are tired. One sunny day, in Europe, on smooth hard ground, I wanted to do more check-levelling work than I ever heard or read man has yet done. Accordingly—after appointing three relay parties of assistants—I dressed somewhat like a jockey; but instead of boots I tied on a pair of thin and elastic sandals, after having imbedded in their soles a thick layer of fine hay. After fourteen hours' meteoric spurt and a bath, I heartily enjoyed several hours of joyous and animated society. Go, thou sluggard, and learn from the camel. The loads of these little ridden vessels you may safely call marine epaulets of admirals. The wool or silk-crested lengthy and narrow humps, carried on back like pilgrim Crusader's hat, may have suggested the first tufted *chapeaux-bras*

of Marshals, with their very mechanism. Or else, these ennobling crest-ornamented reservoirs of Reserved Power which assist to float them with us over pasture-void billows of stones, may lie at the bottom of the myth about the Golden Fleece which these humps resemble in shape, in matter, surface, and often in colour. You remember that this Fleece, while an unfleeced ram, effected the escape of hair-brained Phryxos over the wide thirsty salt wilderness of the sea. At times, when it is not worth while to dress their feet, they would walk over a succession of flowery carpets on slippery ground, and then they would fit well, with the small bannered or pennanted lances of their heads, and the festoons of the rest of their outlines—neck, saddle, belly—into the pageant of a town decorated with floral festoons and "Venetian" bannery poles, to receive and fête its victorious army.

For as these incomparable and intelligent* animals sustain the onslaught of all climates and all elements, so they assist man against, nay, rescue him from, worse enemies also: even the worst, that is, from man himself. What unsubstitutable tenacity to men's active and passive courage the camel is able to impart, even such accounts show as we have in Cope's History of the Rifle Brigade about the distinguished Camel Corps known by the battle of Goolowlee, in 1858. The camel's work is indissolubly welded to Sir Charles Napier's great desert feat, and his glorious, nay, magical, capture of that desert fortress,—a feat not less glorious because as well devised and well organized as it was heroic. The glorious conquest, for a whole conquest it was, is well recorded on the brilliant scroll of history, and ought to be read in his eloquent and

* Intelligent even in a wild state, according to Pallas.

just brother's book about the conquest of Scinde. [If written by a stranger of equal capacity, we might have had a more outspoken book about how enviously abused the hero was for a lifetime of agonizing sacrifices by reptiles in power.] What a pride of the French conquerors of Algiers and Egypt those magnificent looking Camel Corps have been which drill sooner and, *pour comble*, even parade more like perfection than the best horse!—perhaps, because men and officers were all picked, in these countries as carefully as in India, to worthily and decorously suit these superior animals. Would you, for even a moment, doubt the superiority of these French soldiers over all their ever-so-glorious predecessors and comrades if you were told in a passionately declamatory Official Report that they not only conquered whole tribes of never-before-subdued Bedawins, but—O, unmatched paroxysm of heroism!—actually persevered in tending and riding these absurd monsters; while all France kept showering on them the *ondées, goilées, giboulées, lavasses* and deluges of formidable ridicule!!!

It is perhaps as well to try here how we would explain a somewhat delicate point to our purely English-reading friends. The average Frenchman would find the camel as "ridiculous" as an average street-urchin would. The great nation have for themselves a cameline idol of Ridicule, which they worship with giggles. They have caricatured some natural law in physiology, or they have contorted some traits into their likeness or liking, or have exaggerated some feature in scenery or a flower; and it is such feats of their own that give them uproarious pleasure. Our taste (or you may say our developing senses), nurtured by the dynasty of the classics, and educated

in our palæstræ spread over the globe; our taste, which justly values humour higher than *blague;* our taste, which is heartily adopted as a standard by the most refined spirits of France itself, our taste, *enfin*, assigns no rank in human pleasures to the *postiche ridicule* springing from unbecoming grimaces. Scholars like to compare the Ancient Egyptians to Frenchmen: comparing the nature of the former's not quite-defined mirth to the latter's well-defined subjection to frivolous fits. Their quick glance, "*rapide coup d'œil,*" they are proud—beg pardon—vain of. Of this rapid vision, always on the morbid alert to snatch curiosities in order to make them ridiculous, the Egyptians themselves had something to say. The amusing Horapollon interprets "An irreverent" or, as a Frenchman would translate it, impudent, "man who looked with celerity, was expressed by a frog," *Ἄνθρωπον ἀναιδεῖ καὶ κατὰ τὴν ὅρασιν ὀξὺν θέλοντες δηλῶσαι, βάταρχον γράφουσιν.* Could the Ancient Egyptians have slyly "foreshadowed" by this emblem, which, I am told, is also national, a peculiarity in a nation irreverently nick-named after these delightful and irrepressible creatures?

But to return to the ridiculous French camel. By what the average cultivated Frenchman recognizes the "camel" is a microscopic trait or so magnified and insatiably insisted on—but not the ovality of its blood-corpuscules which the bird-like quadruped has in common with the egg-born birds. If a French compiler is hired to write not more than twenty lines about the camel in a popular publication—and the authors of standing are worse—he would, nervously, and with an unhidden *démangaison,* shoot a "rapid *coup d'œil*" over the most noteworthy qualities of the animal; in order to dwell panting and *grimaçant* on

thieves know. (An ass with a burdened tail would simply stop its infernal braying.) You see the ilium on top, I mean the flank-bone on either side, forms a good narrow saddle-back for the boy; while this short end of the huge animal's greyhound-like barrel is so slender that the youth can almost join his heels below.

This group may remind you of the groups in camel-battles recorded in passages of old classics, and in series of Assyrian sculptures in a silent vault of an Island Museum. Only the nine or ten of these sculptures which represent such camels as carry two riders differ from our youths in this, that those show the men both seated close on top the saddle; and the sculptures seem to disagree with the authors in not having the men ride back to back. Nor are the prince and the princess sitting back to back on the camel, as enamelled on a Persian tile of the fifth century.* (His Highness shows his skill in pinning from a distance a ghazel's hind leg to its ear, by a well thrown spear.) Riding, but seated the wrong way, I found in my endeavours for relief during excessive rides not very practicable; in battles, especially when the camel stands, surrounded by enemies, the backward position might be seen commonly enough. In shooting during retreat it is not necessary; nay, it would present a greater width of body to the enemy than is presented by firing while only half turned backward, as in fencing. Napoleon's Camel Corps was said, up to a couple of years ago, to have ridden back to back; but, according to the freshest researches of French savants, that style was merely a *groping* trial of *manège*, and was soon dropped for good.

But surely those Assyrian bas-reliefs, eminently

* In the South Kensington Museum.

sinewy and spirited, were worthy precursors of immortal friezes of the Parthenon, now over the the same building, upstairs, which they preceded thousand years. See the tracery, through my m eye, of those coursers, stretched in one or the oth their fieriest styles of gallop, rushing on unbri unhaltered, unwhipped, unspurred: the beautiful of their pure muscles in action, muscles which b not, impede not, and drop not, are their only harn a light directing touch on any part of this, wi bowstring, an arrow, or foot, seems hardly nee and looks like the exhilarating task of conduc a well-rehearsed trio in orchestra. But not only s is expressed in the Bedawin figures on those sto but even considerable variety and, what is more, solidarity in the doubly-mounted camels, and interac between these several mounts (if I may use the w —I am at a painful loss for another—in this com hensive sense). The Assyrian figures in the same f appear so ceremoniously uniform and meaningless I think the combatants were chiselled by diffe hands. The Arabs are in an inimical inundation Achilles once was; but, unlike the then distra Achilles, they are checking the pursuing waves with *fascines* of their bows. Seated close behind one anot on the height of the saddle, twisted round like scul when looking ahead, they are levelling their b sights in full retreat; like the hymned Parthian ho men whose models in this the Arabs possibly w One and a fragment of the mounts (excuse again) been felled, and a rider from each is tumbling do The camel's legs on one side are knit like a snap sinew or bowstring; on the other, stretched like a s bow; while the palpitating arrow of the necky h

with silent jaws split open, is drooping aside powerless. I have caught myself watching whether she be rising again . . . .

But now suffer my trying to eke out for you the fragments on the presses I may have taken, with omission of the Assyrians. The real situation of these, awkward though it may be, is nothing less than ceremonious. Running after something even harmless which is flying above one's head, is proverbially ridiculous if not seriously risky. Blindfolded by these high aims, the persevering swiftness and the wayward tactics of the Arabs; possibly also by the sun, and almost certainly by volleys of dust which running camels are so skilful in spouting up into the very eyes of the following equestrians, blindfolded by all this, and choked too by the dust, the panting pursuers must feel tantalized to the extreme. The dogging these piping sirens, truly womanlike in this also that they are never more dangerous than when exposed or exposing themselves to pursuit, is sheer folly; and the natural expression of the gasping Assyrians could be nothing else than the highest pitch of rage, shame, and swooning despair. These Assyrians have to manage their own bewildered horses, to spend half their strength and attention in making them do their utmost. Men and horses are parched, half blind, tottering; and when the Assyrians can catch an opportunity to aim at their airy enemies—who expose their narrow side only, and who are as hard to kill as the pretty-faced Furies in the "Æneid," or our black desert-hornets—they often assist the enemy's work by injuring their own horses. Imagine also one of the Arabs deadly hit by rare chance: he drops from all that height to expire in a last scoff, a crushing garrison missile, on an enemy.

Suppose some of the flying citadels clogged; dropped alive, on purpose, or to give to the p pursuers time to approach: what a bulwark in th of the camels the Arabs have to fight behind!—a bu itself fighting! It has been seen in Spain and elsew Again, let the whole weight of a camel be brought d it is an excellent rampart with a splendid "b height," and becomes finally, when abandoned, a da ous hurdle to the fore-done rest of the Assy They come up to the fag-end of the race,—no in pursuit of the enemy who collect past the m but in search of the multitude of their comrad whose bodies, dead, hurt, or prostrate from ignominious exhaustion, they are blasphemin impotent distraction, as only baffled Orientals when extremely exasperated. If the Arabs meant to be shown as defeated, the Assyrians oug have been shown conquering by cool foresight far-seeing blazing Bedawins; vanquishing them rushing from the front and from every side. among the proper weapons might perhaps have shown fire-extinguishing squirts to make the gro slippery.

The meed of glory due to the animals themse however, is amply bestowed on them in the mas pieces of the "camel-stallions," as the supreme amo Arab classics are dubbed by the sovereign people. F these we glean and glue with our own cement s Arabic fragments into an amateur mosaic. "Eager rank," they would rush forward to get into the ranks, "as if rushing "parched" to a well"; not to dr however, but to drench if need; and if, when woun they do not "stand firm," it is to combine the glory combat with the distinction of a race. Or if they, du

intervals of their "spiteful glare into the dust," catch sight of "their masters and their own blood wherewith they are over-running," and which threatens to be doubly fatal under the close but short-joined treacherous legs in their rear, they would utter a watchful grunt or a festive ululatus. The language of the camel is well understood by the Moors, and their poets might interpret, if we are suffered to guess, that the animal means to say, "O, from the excitement of the action my eye is veiled with blood, red, like the draperies above our eye in marriage-trains: no wonder I fancy to see blood everywhere." You may have heard that one of their historical dates is known as "the day of the camel."

Of a truth, poor Darius may be said to have been vanquished by the quadrupeds of the extemporized camel-battalion of Cyrus. The victory was achieved by the camels alone; as the men whom Cyrus put on those animals, or who were willing to mount them, are reported, unlike those of the modern corps, to have been picked men only in the sense of having been selected for the work. Recollect the panic which everywhere preceded these camels; and that they were the puzzle of men, the terror of elephants, the spell of the enemy's horses, though kind matrons to their friends' steeds who prosper and are stimulated by that milk, which is intoxicating in quantities—though of pleasanter taste than the Asiatic kûmis.

I was thinking about the sort of panoply the Cataphracti carried. We know those "effeminate" nations of born warriors wielded, besides their bows and their even now familiar lances of twelve feet, heavy swords six feet long; and judging from the feats of recent camel-artillery, among which was the firing of the pieces from

the camel's back, even standing,* we should fa
panoply included occasionally a battering-ram c
siege-engine worked perhaps by the camel itself.

And, as if all these marvellously different f
courage, power, and versatility were not enoug
Bedawin poets commemorate also the deeds o
animals trained as battle-camels, that is, came
fought like bull-dogs with their teeth, and like l
with unarmed fists. Thus they were superior
sharp-armed battle-lions fed by great Rameses an
princes of glory.

Consider these and such deeds with the p
collaboration which I will not detail; and you w
be surprised that there are castes of camels so hu
considered that their representatives are no mor
than brothers, no more killed than fathers, a
more worked than distinguished patroxine guest

* Compare the illustrations of modern camel-artillery in L
Baines with those of older ones in Cassell's "History of India."

FINAL TABLEAU.

. . . . Oh! I must be tired with all this racing, climbing, and wading on these embers; because I perceive that I begin to lag behind. [Lead her out from the throng, gentle Ibn-es-Sakhara.]

As looking up to the mighty beauty to caress her with my leisurely gaze, I see the sun has culminated. With what dignified ease she is descending! Cammy! . . . Eh? How proud you are, old lady! Well, I will eat the refused biscuit, the last in my pocket, myself. She disdains this after the spicy, thorny camel-biscuit I bribed her with when dismounting. There! She is gratified, it seems, by this resounding slap with my gloveless palm on her inviting neck . . . Ah! this spouting from the lower air up all this eminence is as good at least as a plunge down a Nile bath from such a height. Now, culminating, I feel like this noonday sun: shining, hot, but free in motion, although hungry. Did I not see the lunch-tent pitched ahead? Or was it a white rock, or a sand heap? . . . Oh! your camel only stamps to get rid of flies, or perchance of a scorpion: Let us spurt up among the proud heights of the vanguard.

Oh, ho, gallant Abd-er-Rahman Effendi! you look festive to-day. Where did you get these provokingly beautiful ornaments from? I was not aware such

things were in our simple camp. I can accou
that thing blooming up your conceited camel's nc
the ostrich bunch, dyed red with the same pig
you keep your coxcomb nails glowing with. But
gorgeous net ending in a long thick fringe of ta
Ancient Egyptian or Mauresque combination, vern
and blue silk and gold, this is surely the wo
woman. And so is the motley tasseled raw sill
cast over the saddle-train or saddle-tail. And
this huge extravagance, raw silk and leather, in
three colours, looking like magnified tresses of
ladies, prolonged by twists and chains of twinl
stones and cockle-shells. Your crimson foot-pi
down on the camel's sloping shoulder, has got a
fringe of red-and-yellow long straps—the straps l
and barbed too, like the huge silk-and-leather
ing side-tresses; and the shorter, finer, and thi
set fringe, from whence the longer one hangs ou
like the fine spicy desert grass which clings to and
tects the taller al-fah. Those huge things reach n
down to the ground. They will make your camel stu
or lose her way, as the vain creature keeps looking
on them. You smile! Is some Bedawin Rebekk
swerable for this? And have you, besides, an app
ment, an invitation to join a frolic somewhere in
desert? Your strong camel looks airy and m
gracefully enough for a dance—especially now, as
have given her these gorgeous pendent wings, be
the wind as we move like real birds' wings. The bo
of the ladies' camel coupés, as shown in an illustr
of Sir Austin Layard's, sends out to the right and l
pair of narrow rigid wings of tremendous len
fringed along the whole edges with pendent ta
Sir Austin has not inquired into it, but I think t

floating wings, twenty-five feet across or so, may serve to reduce the jolting if they do not accelerate the speed as well. And besides, the wings may be intended to give to each lady a wide berth, lest they quarrel with each other. But to return to your festive bird-like camel, Effendi. Her head, even in inclination, is like the body of a dance-loving crane, as it would stand with its head under its wing. The back of her head projects a trifle over her neck when erect; as the breast of the crane with its head hidden, projects over its two legs, as both are seen in perspective.

No lunch-tent. Well, I do not see any necessity for its being as strict an institution as it has been. I have missed it on purpose — sometimes; as I thought it more pleasant to ride all day with the cheerful caravan, than spend the last three or, may be, six hours in being one of six or twelve uniform riders merely.

. . . This salt flour in the circulating desert air makes one hungry as much as thirsty. Well, we hope to be back singed, and smoked, and salt-cured, and preserved somehow. I don't care now if we don't halt for lunch: if I ride on to the end of the journey fasting —if I make up my mind. There are many compensations in the steady-going, ever-going camel-train. . . .

There is no lunch-tent pitched *behind*, I hope. . . . Does not this caravan look from here like a tremendous comet? The dry dusty spray shows, among the camels of the nearest group, what some might call the harsh lengths of the legs pleasantly softened. The rest, with the dark-blue background, is the tail of the comet.

With courageous Abu-Balta's fine camel my airy beauty is rubbing cheeks. These animals are very sociable in familiar and congenial sets. . . . What, old man, is my camel the other's daughter? She does not look,

however, as if she were likely to lecture or s
her mother, as girls of her age do in a highly c
and seemingly pious but too lax country. B
the other hand, Abu-Balta's camel looks powerf
sensible enough to strike down my often-k
beauty, if the latter did not know the true a
meaning of devotion. I am almost afraid
hypocritical mother. Keep off, Cammy; camel
have the most excellent daughters are very pe
Such camels I have never seen caressing their off
after they are weaned. But till the colts are full-
these kind of mothers may be caught dosing
comically on their young *while they are asleep.*
it takes the young a long time to be full-grow
the camel, the most perfect of man's animal f
even lives as long as man himself: as if to be
literally his friend for life.

But, I say, ye venerable Father of Guides
could surely afford to give to your towering
licence of rein now and then to pluck a tuft of
which would prevent its being tempted to pick a
pocket, which is as empty now as my gullet. The
of the brute feels like the richest velvet: its little e
like dwarf tulip-leaves. Hêrê Boöpis might gl
those camel eyes, and the long thick fringes on the
margins of the lids might be envy to a Greek m
and the high-arched eyebrow might well grace an
tolian princess. I say, old guide, are you, perchan
the pernicious habit of . . . er . . . supplementin
outlines of those eyes of hers—painting them
Now, nobody hears us: whisper!

Nay, you will not escape me confessionless, m
Effendi, the Slave-of-the-Merciful. Now, truly, wh
the Bedawin damsels was it who wrought these go

ornaments? You managed very cleverly to have that accident near the long tents among the gum-trees, and, I suspect, you have been glued to the neighbourhood till I began to be alarmed. Or was there something settled with some one of the Bedawin caravan? I noticed some remarkable figures of "chassez-croisez" and such-like between the people of the two columns. And some one got lost for half a day again. Well, I liked that desert fantazeeyeh * forty times better than all I saw in the Nile valley put together, only this one was so quickly transitory—except for some sly people.

O, here is a sand-spout coming like a solitary dancer. . . . . Pity that a man is not usually best hinged for dancing—as some hostesses seem to think—when he is the lightest. With women it sometimes seems different; but as these have no law if not kept under dire subjection and dread, it is not worth while taking notice of their doings or appearances. It is very good for the riding camel whose living burden is being lightened as the hunger preys upon the rider. . . . But I am not certain, because pinched people become sometimes troublesome—as I did on a misarranged lunchless day, when I had a grand quarrel and *manège*, and a series of famous gallops with one of my camels. Well, it was only one quarrel, but it was settling. I am glad I did not use the spur welded to the side of my brass stirrup; but I never do it when I am angry. I tried gently drumming on her shoulder with the soft side of my heel's upper part—in understood order to make her speed better. She took no notice and kept walking, as if asleep. Then I hit her a few times with the end of my long and soft silk halter: to no purpose. As much breathing as would blow off the ashes of one's cigarette, or a slight agitation

* Amusement, frolic, feast, ballet, marriage, play, "lark."

of either end of the long halter, should blow l
faster pace. At last—after intimating to her
am going to do if she does not answer—I de
with the bottom part of my boot heel, a blow
shoulder with such a momentum that it woul
brained a bull if applied to its forehead. It ma
mightiness stagger, and submit. She wanted t
me a dance; but my one imperious stamp was e
to make her dance, showing a whole school of a
paces. She was of good lineage; but did not sh
powers till almost knocked down—like some sh
fashioned artists.

This sand-spout is a magnificent *pas seul;* as g
its kind as the ascoliasmus of that old guide was,
our caravan was dancing past. But look, this is
gous to the boy's frisking on the back of the ex
veteran, followed by that graceful *pas de deux* wh
saw an hour or two ago. That *pas de deux* was
I think the feats of those

ἀθύροντες θύρσους

must have been, with the plyed camelsticks, no
then hooking together, brandished like thyrs
would have been a joy to old Anacreon. You s
waltzing and easily bending pillar, having excav
sinuous bed in the sand, is being followed by a
twisting giant, as if the first had been before da
leaven into the new one: which began by wall
on the ground. How the slim fellow, taller tha
columns and obelisks at Karnak, dances, with his
twisted turban in pursuit of the first. The second
has an opposite and a tighter twist, and looks quit
—it is perhaps the female. Man was moulded
obedient clay; but woman from a rib bent rigi

fatal. If her turn be the right way, her soul is all embrace, ay! and stay; but if she be turned the wrong way, each contact is a discomfortable makeshift or a badly muffled offence.

More sand-spouts! . . . Five. . . . Six. . . . Nine . . . Twelve, frequently dipping and rising. . . . Why, it is another caravan, and a worthy vis-à-vis of ours. It is just on that side our lunch-tent would have been—such a good place! But one of these would surely have upset it, spite of deep and heavy precautions.

Ah! being prepared to miss one's lunch is not half so bad as bespeaking one and going without, because servants would lose their way if masters work or wander off the track. I remember being simply happy once or twice in camp—while my friends no doubt were distressing themselves as to my whereabouts. In this season of distressed flight, we clever genii allowed the institution of having lunch while lying huddled under the same small tent on the oppressive road, to be added to our other afflictions. Some of us go reconnoitring for hunting, others for mapping; the rest are scattered about the caravan. It was in these times, chiefly, nay, I think exclusively, that we often missed lunch. At times when I missed it on purpose, I arrived in camp very shortly after the caravan. They were just unladen or unlading, and tents were being pitched as if by clockwork. Descending, say, an hour before the sun, I found that square sieve which served at one time as my open-air couch, and my hand-box, in the half-shade of a few-leaved mimosa. A metal shell with a handle and single tin-shell holding many oysters were brought to me, opened as if by magic, and placed on the couch with suitable spices. Having made an easy hole in that, I

took a book in my hand, to calculate in or read
and having lit a cigarette, I felt contented to
for dinner, amidst the quiet and regular activity o
intelligent and exact men in the novel site. Th
said to myself THIS is true travelling! Its head
soon rehearsed: restless inquiry, studious prepara
thoughtful management, the glorious exercise, the
fresh expressions in the old features of caravan
country, and—I wish I could add as a rule—and Ca

See the airy ballet continues. I hope it will mak
forget our hunger. It is a pity I could not make
see those consummate ballet scenes which we ours
performed with our most delightful work. I menti
the turning of everybody at regulated intervals w
scouring along the scientific waltzes—Strauss' Vien
music or better only wanting. And let me add
the ceremonious bows to our expectant staff or
holders, as if we had been craving, by the kil
glances through our gun-like monocles, for the
turn—booked promptly and with the sense of vict
The varlets cannot complain of our having tra
them into wall-flowers: as we took good care to l
them trained to run free and joyously, and turn
climb promptly.

These sand-spouts seem to keep style with the sl
and movement of our camels. Those farther off s
to skip away without turning round, and seem, as t
caper, only to nutate and oscillate under the loads t
are saddled with. Here is a fine fellow coming q
close to us, twisted like that bronze column of in
plaited desert-snakes which was erected as warning
the confines of that desert which swallowed one
the fated legions. The wide turbans of these com
appear higher-vaulted than the past ones: these l

more like phantoms of palm-trees high as Saint Paul's. This last one looks most particularly like a palm-tree: and it seems hardly to move. Holloa: more "palm-trees!"

But, I say, A. . . . Why, bless you, man, they are palm-trees: I see now that we approach nearer. Now, here, a whole file of real palms is standing, fixed, green! Do you see? do you hear? Real palm-trees, with dark, substantial lofty stems and foliage green, ay, and the stupendous clusters of dates, sapphire, and ruby, and porphyry! And this a close and long avenue of them too, and a close grove nursing some smaller undergrowth I cannot yet distinguish clearly. That place must be a "well" then. Why did nobody tell us about this? I have not seen a palm-tree for ages: the only well there were a few doum-palms I never went to. Hey, Guide! and why are we not leading straight towards them? Ah! of course, there would be this plateau to cross . . . O! that is better: now we begin to veer round. We shall soon be there, eh? I begin to feel cooler already, and my hunger. . . .

Hi! Effendi! Are you asleep? The Nile, the Nile! I see you are awake now! Hah! . . . I was not sure at all, when we started to-day, that we should arrive to-day. Now, this is a most magnificent view of it. It is certainly gorgeously rich in comparison with the landscape at that place further North where we left the River for the Desert. How low down it looks! I suppose we are going to grate down a rather rougher descent from this table-land than we have yet done to-day. I never saw the glorious stream so silvery fair as this . . . It is because the brown water reflects the lightest sky to our high ground. How, as we made that slight turning, the sight burst on us at once! How that

half-belt of life, vegetation, and animation, se
coming to meet and embrace us. For now, by Ne
and all the Nereids! it looks like a magnifice
planted harbour, as it curves in a splendid sweep f
before us towards our right, and quite up to our ri
I was never more delighted with a river landsc
And there it sends out a small horn even to the
We are just entering the concave of a grand serpent
Do you see the minaret among the palms? . . . A
there another—and even a lower cupola; and these
tall houses, and huts. And how crystal clear the a
below: when we were higher it was rather misty.
scene is developing still more beautifully. Now d
there, a little to the right, we see the farthest poi
and the bend seems so sharp and then so quic
straight as if it turned under a right angle; and
further part, this side the bend, looks exactly as if
pilastered steep shore were a long and lofty bri
planted close with rows of palms.

But where are we going to again? Why are
leaving the river again? . . . Boo, what a wind! .
Ah, it is all right. I see. We are not leaving
Nile: the Nile has retreated before us. We might,
this time, have been looking gratified *backwards* to th
farthest palms. Of course it was all a Fata Morga
—Nevertheless it was a magnificent ballet scene
figure of flirtation: it came gracefully up, stretc
out its arms as if to embrace, then bowed
bowed lower, and lower; and when we expected
have her sitting at our feet, there came this ro
wind as a master of misrule with its brilliant colu
of scaly butterflies—the scaly sand, I mean. We clo
our eyes for a few seconds, turned round in our tu
and when we turned back our fair Fata was gone: all

a pennant-like white streak of a cloud, as a handkerchief fluttering "congé." On the ground remain a few juniper-like tufts, and a sprinkling of creeping mist-like shreds of crêpe and flounces in a ball-room just abandoned. The rest is bleak limestone rock, and sand of course; and the sky looks as if it had been long waiting for the painter. What made the delusion still greater was the apparent crystal transparency of the air . . . And we did not even suspect the supernatural magnitude of the objects.

Grand it was; and its disappearance from before the stately caravan is in doleful harmony with my dissolving hopes about lunch to meet our mighty hunger. Because, as they expect the Nile is somewhere on this day's journey, they did not even prepare for lunch by the way, as I hear: but it may be midnight before we reach the river. Such is human nature in these latitudes. The Nile is certainly not now visible, by either circuitous or straight visual vibrations . . . Ah! that is right: chaunt on, much wandered, much enduring comrades of bronze with sinews of steel! Compensate us! Think again of Orpheus and Tantalus. The men sing:—

"Strut along, O my joy, strut along. . . . ."

And how they strut along! The style seems a combination between the stately and grave court dances of minuet, danza, palotás and pavan—the latter two with caps, full pomp, swords, and trains: true peacock dances. They do move their trains, some of them, with a stately swoop. That batch there behind, four deep, moves very prettily. Did you never see a set of consummate Arab dancers perform a camel-dance? They almost imitate the animal's descent and ascent:

but do not touch the ground with anything else
their feet and sticks.

Here comes another scene. And this is as rea
the spouts, as I can see the advancing cloud tran
stantiating into a flight of small birds. They a
floating shower of sparrows, rustling and chirping,
have smelt out the remainder of our crumbs. I
how the winged pretty beggars are clustering round
courtesy to us, as I am throwing up high these cru
I left in my pocket for manners' sake. Thus mi
the crew of Cook or Columbus have rejoiced at the l
birds, as these fellows smile on these satellites of
men of culture.

What is this? By Thoth, there is another pa
coming to meet us! But this dry wide bed, or rat
strip, between the two low table-lands is not a cara
route . . . . . I see: a night or two ago a couple
those indefatigable fellows rode ahead of us, to ma
arrangements. And—as the time of our arrival is tl
known—the friends and friends' friends of our tea
sters are approaching in a little caravan to salute:
horse, on donkeys, on foot. Many of these have co
up several days' journeys from the North, and ma
came down all the way from Khartoom, and ha
been waiting here for weeks. There are even t
women: one with gourds of milk, another with
baby.

Look at these youths, of all ages as they a
stopping now and again with becoming salutatio
affected as becomes men, passing slowly through t
troop and, after joining some particular friend, they co
on with us. These salutations in the desert, dignifi
and even ceremonious, are yet graceful and easy. T
solemn gravity of the quiet and subdued movemen

might well become a church. We cannot well follow everything from camel-back: and, to tell the whole truth, I do not care to pry too closely in order to see all things too exactly; but the attitudes alone are expressive enough—as the pairs stand erect and earnest, side by side, yet half turned towards each other, with joining hands. They, ever conversing as they come along, now look as if the questions and answers between them were more important than mere welfare: as if the topics were about solemn trusts and solemn accounts. The elders are naturally dignified, the younger ones attentively bashful. Thus several pairs follow, perhaps hand in hand. They would touch their own breast or lips, or forehead, and lightly place the arm on the friend's shoulder, or caress his back. Then one of them would stop his hand at his waist—but hardly touching any part: or he would place his hands in the friend's, both palms upwards or together, and slowly, gently capture the thumbs also, and such like movements. While they do similar things, they utter in a low voice something like a thanksgiving prayer.

I think the persuasive features of these youths may safely settle our last doubts about lunch: if the servants ask them how far, they will say the Nile is at hand. I will coil my rein around the minaret of the saddle-pin, for a mimic balcony; and with your leave I will tighten my sash, and thus clinch my resolution of forbearing road-side lunch: and, by the way, the time will soon look more like dinner.

Hear the murmur travelling through the caravan's length! Now a louder wave of chat breaks here and there in exclamation. Some fellows become demonstra-

tive as they jump up high enough to hug some h
camel's neck, and draw themselves up to climb
saddle. I suppose they are tired. Some camels
begin to behave unruly: clearing their throats—perh
to prepare for a mighty chorus in some camp. Oh,
while I have been indulging this back-sight. . . y
yes: what looks like a pair of low streaks of porphy
coloured clouds, in the shape of sugar tongs, down in
distance, that is the palm-bordered Nile, sure enou
Well, it is a long way off: but I have surrendered
last descendant in the prolific line of my hopes ab
that meal.

I say, Effendi, Deputy Master of Misrule, rememb
before you speed ahead to chalk out the camp, to k
from the houses and trees as far as you can. Counter
that womanish proneness of the men to nestle wh
others have been. You know the finest of acacias a
sycamores are beset, like the finest tree in Paradise, w
animated nuisance.

. . . I believe our quartermasters have met w
another batch of people. . . . It seems they
approaching. . . They are headed by the chief of
village. . . Ah! the doctor is just coming up to
van: he is the man, as the oldest European resident
Egypt, to receive the chief properly: and most lik
the chief himself or some of his friends will want
doctor's advice too. Nay, but there is somethi
hearty about the worthy old scribe. What do you s
Doctor? (I am quite deaf in this desert.) Ah! .
They have heard terrible stories about our fate. A
no wonder. . . .

Ha! this looks like a green meadow; though it
this side artificial irrigation. . . But it is only rush

with shrubs, and I hail our old friends the buxom, blooming, buoyant asclepiads. They look like the balloon-lamps in a garden-party. . . . Ah! this irrigated Nile-bound zone is better, with its fresh and fragrant vegetables and blooming trees. There are some houses, a story high, among the mud-boxes beyond these palms. Yes! the palms *are* a grateful sight to the Bedawin wanderers. The wanderers, long masterless, rejoice at the sight of the "princes of the vegetable kingdom," as Linné calls the palm-trees. And as we advance, I see my camel keeps earnestly looking at a magnificent discoidal mimosa covered with flowers and foliage. The gigantic "ball-bouquet" looks as if the few men and women standing underneath it were bringing it to my appreciative camel. But I daresay my royal animal will not be prouder than the Prophet, who went to the mountain which did not come to him.

But yonder is the gayer though homelier scene of the bespoken market—the buffet of our entertainment! There has not been such a festive gathering in this small village for years, I dare assert! How bright it looks.

Now, as our heights are, like an Eastern Duncan's army, passing in files or pairs through the little grove of these lofty palms, we are concluding, you see, with the last figure of the decorous "Sir Roger de Coverley!" As in the ball-room the files of pairs pass under the pointed arches, each formed by a swain and a lass who keep their hands joined over their heads,—so are we now passing through couples of these "princely" palms—male and female—joining their pointed-arched branches close enough above our exalted heads. For a final fortissimo of the music there is the mighty organ in its

strength, now as the camels are about unloading. as if I, as a steward, had been commanding the "touche" of the music, I catch myself humming "save the Queen!" and my mighty, yet gentle c stops, and sinks heavily on her knees.

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